This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

585526 A

REGISTER
OF
UNIVERSITY

ARY, 1922 NUMBER 3

logue
1-1922

rinceton University
, NEW JERSEY
1922

OFFICIAL REGISTER OF PRINCETON UNIVERSITY

[Entered as second-class matter, December 23, 1909, at the Post Office at Princeton, N. J., under the Act of July 16, 1894.]

These publications include:

Reports of the President and the Treasurer.
Undergraduate Announcement.
Graduate School, School of Electrical Engineering, School of Architecture.
Annual Catalogue.

The current number of any of these publications may be obtained by applying to THE SECRETARY OF THE UNIVERSITY, PRINCETON, N. J.

CATALOGUE

OF

PRINCETON UNIVERSITY

ONE HUNDRED AND SEVENTY-FIFTH YEAR

1921-1922

PUBLISHED BY THE UNIVERSITY
PRINCETON, NEW JERSEY
1922

PRINCETON
UNIVERSITY
PRESS

CONTENTS

CALENDAR vii
STATED MEETINGS x
OFFICE HOURS x
TRUSTEES xii
COMMITTEES OF THE TRUSTEES xv
OFFICERS OF ADMINISTRATION xvi
COMMITTEES OF THE FACULTY xviii
HISTORY OF THE UNIVERSITY xix
GROUNDS AND BUILDINGS xxvii

PART I. OFFICERS OF INSTRUCTION

Faculty and Instructors 3

PART II. ADMISSION TO PRINCETON UNIVERSITY

Terms of Admission 19

PART III. PLAN OF UNDERGRADUATE STUDY

Requirements for Bachelors' Degrees . . . 43
General Regulations 56
Course of Study 45
Graduation in Three Years 52
Method of Instruction 53
Honors 55
School of Engineering 56

PART IV. DEPARTMENTS OF INSTRUCTION

i. Philosophy 67
ii. Classics 69
iii. Modern Languages 73
iv. English 76
v. Art and Archaeology 80
vi. History and Politics 86
vii. Economics and Social Institutions . . . 87
viii. Mathematics 91
ix. Physics 92
x. Astronomy 94
xi. Chemistry 95

Secretary's Office, 3-12-23.

xii. Biology 99
xiii. Geology 101
xiv. Psychology 103
xv. Hygiene and Physical Education . . . 105
Department of Civil Engineering 107
Courses not included in preceding Departments . . 114
Department of Military Science 116
Department of Music 122

PART V. GENERAL REGULATIONS
Terms and Vacations 127
Registration and Choice of Electives . . . 127
Attendance 128
Honor System 129
Conditions and Absence from Examinations . . 130
Freshman Tests 136
Standing 136
Final Rank 137
Commencement Speakers 137

PART VI. PHYSICAL EDUCATION, ATHLETICS, AND STUDENT HEALTH
Physical Education and Athletics . . . 141
Student Health Service 146
Isabella McCosh Infirmary 147

PART VII. UNIVERSITY LIBRARY, RELIGIOUS ACTIVITIES, PUBLIC LECTURES, UNIVERSITY STORE, UNIVERSITY PRESS
University Library 153
Religious Worship and Activities 160
Public Lectures 162
University Store 164
University Press 164

PART VIII. EXPENSES, ROOMS, DINING HALLS, BILLS, PRIZES, REMISSION OF TUITION, SCHOLARSHIPS, MINISTERIAL AND CHARITABLE FUNDS, STUDENT EMPLOYMENT
Expenses 167
Rental of Rooms 168

University Dining Halls 173
University Bills 173
Prizes 175
Remission of Tuition 183
Scholarships 185
Ministerial Funds 209
Charitable Funds 209
Bureau of Appointments and Student Employment 209

PART IX. GRADUATE SCHOOL, SCHOOL OF ELECTRICAL ENGINEERING, SCHOOL OF ARCHITECTURE

Graduate School 213
Fees 214
Degrees 215
Graduate College 217
Fellowships 220
Courses of Instruction 227
Courses in Princeton Theological Seminary . . 279
School of Electrical Engineering 280
School of Architecture 285

PART X. DEGREES AND HONORS, 1920-1921

Degrees Conferred 301
Honors Conferred 308

PART XI. NATIONAL ALUMNI ASSOCIATION, GRADUATE COUNCIL, ALUMNI ASSOCIATIONS, ALUMNI REPRESENTATION

National Alumni Association and Graduate Council 315
Alumni Associations 319
Election of Alumni Trustees 324

PART XII. STUDENTS, DIRECTORY, INDEX

Students 329
Summary 383
Directory 387
Index 419

JANUARY, 1922

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..

FEBRUARY, 1922

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	..	..	..	..

MARCH, 1922

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..

APRIL, 1922

..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	..	..	..	..	..	..

MAY, 1922

..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..
..	..	..	..	..	..	..

JUNE, 1922

..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	..
..	..	..	..	..	..	..

JULY, 1922

..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

AUGUST, 1922

..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..
..	..	..	..	..	..	..

SEPTEMBER, 1922

..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
..	..	..	..	..	..	..

OCTOBER, 1922

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

NOVEMBER, 1922

..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	..	..
..	..	..	..	..	..	..

DECEMBER, 1922

..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

JANUARY, 1923

..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	20	31	..	..	..

FEBRUARY, 1923

..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	..	..	..

MARCH, 1923

..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

APRIL, 1923

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	..	..	..	..	..

MAY, 1923

..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..

JUNE, 1923

..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

JULY, 1923

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

AUGUST, 1923

..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..
..	..	..	..	..	..	..

SEPTEMBER, 1923

..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	..	..	..	..	..	..

OCTOBER, 1923

..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..
..	..	..	..	..	..	..

NOVEMBER, 1923

..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	..
..	..	..	..	..	..	..

DECEMBER, 1923

..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

UNIVERSITY CALENDAR

1921

Sept. 12-26, Mon. Examinations for the removal of F conditions.
Sept. 19-22, Mon. Entrance examinations. Held at Princeton only.
Sept. 20, Tues. Last date for making necessary changes in First Term Electives.
Sept. 26, Mon. 2 p. m. Meeting of the Freshman Class, McCosh 50. Attendance compulsory.
Sept. 27, Tues., 3 p. m. Formal opening exercises. Alexander Hall.
Oct. 13-15, Thurs. First part of examination for the degree of Doctor of Philosophy.
Oct. 17, Mon., 4 p. m. Meeting of the Committee on the Course of study on changes in prospectus of Second Term (1921-1922) courses.
Oct. 27, Thurs. Fall Meeting of the Board of Trustees.
Nov. 1, Tues. Last date for corrections in prospectus of Second Term (1921-1922) courses.
Nov. 21, Mon. Second Term prospectus presented.
Nov. 24, Thurs. Thanksgiving Day. Class exercises suspended.
Dec. 12-Jan 21, Mon. Conferences with advisors on Second Term (1921-1922) Electives.
Dec. 17, Sat., 2.15 p. m. **Christmas recess** begins.

1922

Jan. 5, Thurs., 11.15 a. m. Christmas recess ends.
Jan. 12, Thurs. Winter meeting of Board of Trustees.
Jan. 16, Mon., 4 p. m. Meeting of Committee on Course of Study for changes in First Term (1922-1923) prospectus. President's office.
Jan. 21, Sat. Last date for filing Second Term (1921-1922) Electives.
Jan. 28, Sat. Last date for making necessary changes in Second Term (1921-1922) Electives.
Feb. 4, Sat. Midyear examinations begin.
Feb. 14, Tues. First Term ends.
Feb. 15, Wed. Second Term begins.
Feb. 15-16, Wed.-Thurs. Class exercises suspended.
Feb. 17, Fri., 8 a. m. Class exercises resumed.
Feb. 20, Mon., 4 p. m. Last meeting of Committee on Course of Study for changes in First Term (1922-23) prospectus. President's office.
Feb. 22, Wed. Washington's Birthday.
Mar. 1, Wed. Last date for filing course descriptions for Undergraduate Announcement.

Last date for filing applications for fellowships and graduate scholarships. Office of the Graduate School.

Apr. 13, Thurs. Spring meeting of Board of Trustees.

Apr. 13, Thurs., 2.15 p. m. Easter Recess begins.

Apr. 16, Sun. Easter Sunday.

Apr. 17, Mon., 11.15 a. m. Easter Recess ends.

Apr. 27-May 25, Thurs. Conferences with advisors on First Term (1922-1923) Electives.

May 11, 12, 13, Thurs. First Part of Examination for degree of Doctor of Philosophy.

May 25, Thurs. Last date for filing First Term (1922-23) Electives.

May 26,-June 7, Fri. Senior final examinations.

June 1, Thurs. Last date for making necessary changes in Electives.

Last date for applications for degree of Master of Arts.

June 5-16, Mon. Underclass final examinations.

June 18, Sun. Baccalaureate Sunday.

June 19, Mon. Class Day. Commencement Meeting of Board of Trustees.

June 20, Tues. Commencement Day. Election of Alumni Trustee.

June 19-24, Mon.-Sat. College Entrance Board examinations. Held at Princeton and elsewhere.

Sept. 1, Fri. Last date for requests for postponed examinations.

Sept. 18-21, Mon.-Thurs. Entrance examinations. Held at Princeton only.

Sept. 20, Wed. Last date for necessary changes in First Term electives.

Sept. 25, Mon., 2 p. m. Meeting of Freshman Class and other new students. McCosh 50. Attendance compulsory.

Sept. 25-30, Mon. Postponed examinations.

Sept. 26, Tues., 3 p. m. Formal opening exercises. Alexander Hall.

Oct. 12-14, Thurs. First Part of Examination for degree of Doctor of Philosophy.

Oct. 16, Mon. Stated meeting of Committee on Course of Study for changes in Prospectus for Second Term (1922-1923).

Oct. 26, Thurs. Fall meeting of Board of Trustees.

Nov. 1, Wed. Last meeting of Committee on Course of Study for changes in Prospectus for Second Term (1922-1923).

Nov. 20, Mon. Second Term Prospectus and schedule presented.

Nov. 30, Thurs. Thanksgiving Day. Class exercises suspended.

Dec. 1, Fri., 10.15 a. m. Recess ends.

Dec. 16-Jan. 20. Conferences with advisers on Second Term (1922-23) Electives.

Dec. 19, Mon., 2.15 p. m. Christmas Recess begins.

1923

Jan. 5, Fri., 11.15 a. m. Christmas Recess ends.
Jan. 11, Thurs. Winter meeting of Board of Trustees.
Jan. 15, Mon., 4 p. m. Meeting of Committee on Course of Study for changes in prospectus First Term (1923-24). President's office.
Jan. 20, Sat. Last date for filing Second Term (1922-23) electives.
Jan. 25, Thurs. Last date for changes in Second Term electives.
Feb. 3, Sat. Midyear examinations begin.
Feb. 13, Tues. First Term ends.
Feb. 14, Wed. Second Term begins.
Feb. 14-15, Wed.-Thurs. Class exercises suspended.
Feb. 16, Fri., 8 a. m. Class exercises resumed.
Feb. 19, Mon., 4 p. m. Last meeting Committee on Course of Study for changes in prospectus First Term (1923-24). President's office.
Feb. 22, Thurs. Washington's Birthday.
Mar. 1, Thurs. Last date for application for fellowships and graduate scholarships.
Last date for filing course descriptions for Undergraduate Announcement.
Apr. 10, Thurs. Spring meeting of Board of Trustees.
May 22, Tues. Last date for filing electives for First Term.
May 25-June 6 Senior Final Examinations.
June 5, Tues. Underclass examinations begin.
June 17, Sun. Baccalaureate Sunday.
June 18, Mon. Class Day.
June 19, Tues. Commencement Day. Election of Alumni Trustee.
June 18-23, Mon.-Sat. College Entrance Board examinations. Held at Princeton and elsewhere.

STATED MEETINGS

The stated meetings of the Board of Trustees are held on the fourth Thursday in October, on the second Thursdays of January and April, and on Monday of Commencement Week.

Meetings of the Board 1921-1922: October 27, January 12, April 13, June 19.

The University Faculty meets at 5 P. M. on the first and third Mondays of each month during the academic year except when the University is not in session. It also meets immediately after the formal exercises on the opening day in September.

Meetings of the Faculty, 1921-1922: September 27, October 3, 17, November 7, 21, December 5, January 16, February 6, 20, March 6, 20, April 3, 17, May 1, 15, June 5.

OFFICE HOURS

THE PRESIDENT OF THE UNIVERSITY: Nassau Hall, 11 A. M. to 1 P. M. daily.

THE TREASURER OF THE UNIVERSITY: Stanhope Hall, 9 A. M. to 4:30 P. M.; Saturdays 9 A. M. to 12:30 P. M.

THE SECRETARY OF THE UNIVERSITY: Nassau Hall, 9 A. M. to 4:30 P. M.; Saturdays, 9 A. M. to 12:30 P. M.

THE REGISTRAR OF THE UNIVERSITY: Nassau Hall, 8:30 A. M. to 4:30 P. M.; Saturdays, 8:30 A. M. to 12:30 P. M.

THE CONTROLLER, THE SUPERINTENDENT OF GROUNDS AND BUILDINGS, THE UNIVERSITY POWER COMPANY, AND THE PURCHASING DEPARTMENT: Stanhope Hall, 9 A. M. to 4:30 P. M.; Saturdays 9 A. M. to 12:30 P. M.

THE DEAN OF THE GRADUATE SCHOOL: Nassau Hall. Office open from 9 A. M. to 3 P. M.; Saturdays, 9 A. M. to 12 M.; July 1 to September 1, 9 A. M. to 12 M. Office hours of the Dean, 12 M. to 1 P. M. daily, except Saturday.

THE DEAN OF THE FACULTY: Dean's House, 1:30 to 2:30 P. M. daily, except Saturday.

THE DEAN OF THE COLLEGE: Nassau Hall, 2 to 3 P. M. daily, except Saturday.

THE CLERK OF THE FACULTY: Nassau Hall, 9 A. M. to 4:30 P. M.; Saturdays, 9 A. M. to 12:30 P. M.

THE COMMITTEE ON ENTRANCE, Professor Buffum, Secretary: 60 Hodge Road, 1:00 P. M. daily.

THE COMMITTEE ON EXAMINATIONS AND STANDING, DEAN W. F. Magie, Chairman: Dean's House, 1:30 to 2:30 P. M., daily, except Saturday. F. L. Hutson, Recording Secretary, Registrar's Office.

THE COMMITTEE ON OUT-DOOR SPORTS, Professor McClenahan, Chairman: The Palmer Physical Laboratory, Room 207, 12:30 to 1 P. M. Mondays and Tuesdays, 12 M. to 1 P. M. Wednesdays, Thursdays and Fridays; or at the office of the Dean of the College, 2 to 3 P. M. daily, except Saturday.

THE COMMITTEE ON NON-ATHLETIC ORGANIZATIONS, Professor D. C. Stuart, Chairman: Room 208, Nassau Hall, 4 to 5 P. M. Mondays.

THE SUPERVISOR OF FRESHMEN: Room 316, Nassau Hall; 9:30 A. M. to 1:00 P. M.; 2:30 P. M. to 4:30 P. M.

INFORMATION

For catalogues and other numbers of the OFFICIAL REGISTER of Princeton University apply to the Secretary of the University, Princeton, New Jersey.

For information concerning entrance or courses of instruction apply to the Registrar of the University, Princeton, New Jersey.

For information concerning the Graduate School apply to the Dean of the Graduate School, Princeton, New Jersey.

TRUSTEES OF THE UNIVERSITY

THE GOVERNOR OF THE STATE OF NEW JERSEY, *ex-officio*, PRESIDENT OF THE BOARD OF TRUSTEES.

JOHN GRIER HIBBEN, PH.D., LL.D., LITT.D., PRESIDENT OF THE UNIVERSITY, and, in the absence of the Governor, President of the Board.

LIFE TRUSTEES

HON. JOHN AIKMAN STEWART, LL.D., SENIOR TRUSTEE .....New York, N. Y.
(Elected April, 1868)

GEORGE B. STEWART, D.D., LL.D.....Auburn, N. Y.
(Elected June, 1887)

CYRUS H. MCCORMICK, A.M. .....Chicago, Ill.
(Elected June, 1889)

JOHN DIXON, D.D. .....Trenton, N. J.
(Elected November, 1890)

MELANCTHON W. JACOBUS, D.D. .....Hartford, Conn.
(Elected February, 1891)

HON. BAYARD HENRY, A.M. .....Philadelphia, Pa.
(Elected April, 1896)

HENRY W. GREEN, A.M., LL.B. .....Trenton, N. J.
(Elected March, 1898)

ALEXANDER VAN RENSSELAER, A.M. .....Philadelphia, Pa.
(Elected Alumni Trustee June 1901; reëlected, June 1906, and June 1911; Life Trustee June 1916.)

ROBERT GARRETT, B.S. .....Baltimore Co., Md.
(Elected October, 1905)

HENRY B. THOMPSON, B.S. .....Greenville, Del.
(Elected June, 1906)

JOSEPH B. SHEA, A.B. .....Pittsburgh, Pa.
(Elected June, 1906)

EDWARD W. SHELDON, A.M. .....New York, N. Y.
(Elected March, 1907)

WILSON FARRAND, L.H.D. .....South Orange, N. J.
(Elected Alumni Trustee June 1909; reëlected, June 1914; Life Trustee June 1919.)

PARKER D. HANDY, A.B. .....New York, N. Y.
(Elected June, 1910)

JOHN M. T. FINNEY, M.D. .....Baltimore, Md.
(Elected June, 1910)

WILLIAM COOPER PROCTER, B.S. .....Cincinnati, Ohio
(Elected May, 1912)

CHARLES SCRIBNER, A.B. .....Morristown, N. J.
(Elected May, 1912)

JOHN O. H. PITNEY, A.M. .....Morristown, N. J.
(Elected October, 1913)
WILLIAM C. OSBORN, LL.D. .....New York, N. Y.
(Elected June, 1914)
KNOX TAYLOR, B.S. .....High Bridge, N. J.
(Elected June, 1918)
EDWARD D. DUFFIELD, A.M., LL.B. .....South Orange, N. J.
(Elected April, 1920)
LEWIS B. STILLWELL, D.Sc. .....Lakewood, N. J.
(Elected April, 1920)
WILSON S. ARBUTHNOT, A.B. .....Pittsburgh, Pa.
(Elected June, 1920)

ALUMNI TRUSTEES

MATTHEW C. FLEMING, A.M., LL.B. .....New York, N. Y.
(Term expires June, 1922)
JOHN STUART, C.E. .....Chicago, Ill.
(Term expires June, 1923)
WALTER E. HOPE, A.B., LL.B. .....New York, N. Y.
(Term expires June, 1924)
J. LIONBERGER DAVIS, LL.B. .....St. Louis, Mo.
(Term expires June, 1925)
GORDON S. RENTSCHLER, A.B. .....Hamilton, Ohio
(Term expires June, 1926)

REGIONAL TRUSTEES

JOHN MCWILLIAMS, JR. .....Pasadena, Cal.
(Elected January 1918; reëlected January 1919; term expires June, 1922)
JAMES D. DENEGRE, A.M., LL.M. .....St. Paul, Minn.
(Elected January 1918; reëlected January 1920; term expires June, 1923)
HUGH RICHARDSON .....Atlanta, Ga.
(Elected January 1918; reëlected April 1921; term expires June, 1924)

Treasurer
HENRY GREEN DUFFIELD, A.B.

Clerk of the Board of Trustees
WILSON FARRAND, L.H.D.

Secretary of the University
VARNUM LANSING COLLINS, A.M.

Controller
GEORGE C. WINTRINGER, E.E.

Princeton University

Executive Secretary
H. Alexander Smith, A.M., LL.B.

Counsel
Francis Speir, A.M., LL.B.

Supervising Architect
Ralph Adams Cram, Litt.D.

Consulting Landscape Gardener
Beatrix Farrand

COMMITTEES OF THE TRUSTEES

Administrative Committee: PRESIDENT HIBBEN, Chairman; DR. JACOBUS, MR. THOMPSON, MR. HANDY, MR. PITNEY, MR. SCRIBNER, MR. OSBORN, (MR. WINTRINGER, Secretary).

Committee on Finance: MR. PITNEY, Chairman; PRESIDENT HIBBEN, MR. STEWART, MR. GREEN, MR. THOMPSON, MR. SHELDON, MR. HANDY, MR. SCRIBNER, MR. FLEMING, MR. OSBORN, MR. E. D. DUFFIELD, (MR. H. G. DUFFIELD, Secretary).

Committee on Grounds and Buildings: MR. THOMPSON, Chairman; PRESIDENT HIBBEN, MR. HENRY, MR. GREEN, MR. GARRETT, MR. TAYLOR, MR. HOPE, MR. STILLWELL, MR. ARBUTHNOT, MR. RENTSCHLER, (MR. WINTRINGER, Secretary).

Committee on the Curriculum: DR. JACOBUS, Chairman; PRESIDENT HIBBEN, DEAN MAGIE, DEAN WEST, DEAN FINE, MR. THOMPSON, MR. FARRAND (Secretary), MR. FLEMING, DR. FINNEY, MR. HOPE, MR. STUART, MR. STILLWELL.

Committee on the Library: MR. SCRIBNER, Chairman; PRESIDENT HIBBEN, MR. GEROULD, (Secretary), MR. GREEN, MR. VAN RENSSELAER, MR. SHELDON, DR. FINNEY, MR. HOPE, MR. DUFFIELD, MR. DAVIS.

Committee on Honorary Degrees: PRESIDENT HIBBEN, Chairman; DR. JACOBUS, MR. HENRY, MR. SHELDON, MR. FARRAND, (Secretary), MR. OSBORN, MR. DAVIS, MR. ARBUTHNOT, PROFESSOR ABBOTT, PROFESSOR MUNRO, PROFESSOR SCOTT.

Committee on the Graduate School: MR. PROCTER, Chairman; PRESIDENT HIBBEN, DEAN WEST, (Secretary), MR. MCCORMICK, DR. JACOBUS, MR. SHEA, MR. FARRAND, MR. FLEMING, MR. DAVIS, MR. RENTSCHLER.

Committee on Morals and Physical Education: MR. GARRETT, Chairman; PRESIDENT HIBBEN, DEAN MCCLENAHAN, (Secretary), DR. STEWART, DR. DIXON, DR. FINNEY, MR. TAYLOR, MR. STUART, MR. DUFFIELD, MR. STILLWELL, MR. RICHARDSON, MR. DAVIS.

Committee on Sanitation (advisory to Committee on Grounds and Buildings): PROFESSOR RAYCROFT, Chairman; PROFESSORS CONKLIN, DAHLGREN, LOOMIS, TOOKER, DR. SINCLAIR, DR. CARNOCHAN, MR. WINTRINGER, (Secretary).

Committee on Conference (with Committee on the Curriculum): PROFESSORS EISENHART, FETTER, CAPPS, SPAETH, MCCLURE, D. R. STUART.

OFFICERS OF ADMINISTRATION

JOHN GRIER HIBBEN, PH.D., LL.D., LITT.D., Nassau Hall
President

ANDREW FLEMING WEST, PH.D., LL.D., 3 Nassau Hall
HON. D.LITT (OXON.)
Dean of the Graduate School

HENRY BURCHARD FINE, PH.D., LL.D., 200 Mercer St.
Dean of the Departments of Science

WILLIAM FRANCIS MAGIE, PH.D., LL.D., The Dean's House
Dean of the Faculty

HOWARD MCCLENAHAN, E.E., M.S., LL.D., 214 Nassau Hall
Dean of the College

ARTHUR MAURICE GREENE, JR., M.E., D.SC., Troy, N. Y.
Dean of the School of Engineering

HENRY GREEN DUFFIELD, A.B., Stanhope Hall
Treasurer

WILSON FARRAND, L.H.D., Newark, N. J.
Clerk of the Board of Trustees

VARNUM LANSING COLLINS, A.M., 313 Nassau Hall
Secretary

GEORGE C. WINTRINGER, E.E., Stanhope Hall
Controller

H. ALEXANDER SMITH, A.M., LL.B., Nassau Hall
Executive Secretary

FREDERICK LEROY HUTSON, PH.D., 212 Nassau Hall
Registrar

RADCLIFFE HEERMANCE, A.M., 317 Nassau Hall
Supervisor of Freshmen

JOHN SAVILLE COSGRAVE, Stanhope Hall
Assistant to the Treasurer

WILBUR FRANKLIN KERR, 209 Nassau Hall
Assistant to the Registrar

GORDON GOWANS SIKES, A.M., 314 Nassau Hall
Assistant to the Secretary

FRED R. APGAR, Stanhope Hall
Purchasing Agent

EDWARD ALLEN MACMILLAN, C.E., Stanhope Hall
Superintendent of Grounds and Buildings

HOWARD REINOEHL OPIE, A.B., 316 Nassau Hall
Director, Bureau of Appointments and
Student Employment

JOHN MCDOWELL CARNOCHAN, M.D., McCosh Infirmary
Associate University Physician

DONALD BUNKER SINCLAIR, M.D., McCosh Infirmary
Associate University Physician

HELEN GROSS, R.N., McCosh Infirmary
Infirmarian

HENRY BOVIE, 2 N. M. R.
Proctor

COMMITTEES OF THE FACULTY 1921-1922

Clerk of the Faculty: PROFESSOR V. L. COLLINS.

Committee on Committees: PROFESSORS ABBOTT, EISENHART, MUNRO.

Course of Study: The PRESIDENT, Chairman; PROFESSORS ABBOTT, CONKLIN, EISENHART, DIXON, FINE, HARPER, W. F. MAGIE (Secretary), JONES, MUNRO, SMYTH, VREELAND, WARREN, WEST, FITE, the REGISTRAR.

Attendance: DEAN MCCLENAHAN, Chairman; PROFESSOR GILLESPIE.

Discipline: DEAN MCCLENAHAN, Chairman; PROFESSORS GILLESPIE, MORGAN, PHILLIPS, TROWBRIDGE, SCOON, WEBER.

Entrance: DEAN MCCLENAHAN, Chairman; PROFESSORS BASORE, BUFFUM, CROLL, HUTSON, A. C. JOHNSON, MACINNES, W. F. MAGIE, D. SMITH, WERTENBAKER.

Library: PROFESSORS ALEXANDER, CORWIN, JONES, DAVID MAGIE, MARDEN, MATHER, D. C. STUART.

Non-Athletic Organizations: PROFESSORS D. C. STUART (Chairman), BUTLER, KENNEDY, ALEXANDER RUSSELL, SHIPMAN, COLLINS, COLT, HEERMANCE.

Examinations and Standing: DEAN MAGIE, Chairman; PROFESSORS BENDER, CHAPMAN, CONSTANT, ELDERKIN, FOSTER, HENDEL, MCCLENAHAN, MACINNES, ROOT, SCOON, the REGISTRAR.

Graduate School: DEAN WEST, Chairman; PROFESSORS ARMSTRONG, CONKLIN, EISENHART, JONES, KEMMERER, BOWMAN, MCELROY, W. F. MAGIE, MARQUAND, PARROTT, CAPPS, SMYTH.

Undergraduate Conference: PROFESSORS COLT, GAUSS, HEERMANCE, KENNEDY, MCCABE.

Outdoor Sports: PROFESSORS FINE, HUTSON, KENNEDY, MCCLENAHAN, MCCLURE, RAYCROFT, SPAETH.

Public Lectures: PROFESSORS MCCLELLAN, (Chairman); COLLINS, MCCOMAS, PRENTICE, SHELLABARGER, MOREY, MR. TOMLINSON.

Conference: PROFESSORS EISENHART, FETTER, SPAETH, CAPPS, MCCLURE, D. R. STUART.

Preceptorial: PROFESSORS HARPER, HOWARD, R. B. C. JOHNSON, MURCH, MYERS, OSGOOD, THAYER, DEWING, SHIPMAN.

Sanitation (advisory to the Trustees' Committee on Grounds and Buildings): PROFESSOR RAYCROFT, Chairman; PROFESSORS CONKLIN, DAHLGREN, LOOMIS, TOOKER, D. B. SINCLAIR, MR. WINTRINGER, and DR. CARNOCHAN.

Honorary Degrees: PROFESSORS ABBOTT, MUNRO, SCOTT.

Schedule: The REGISTRAR, DEAN MAGIE, PROFESSORS MCCABE, BENDER, GREEN, VEBLEN.

ADVISORY COUNCIL OF THE FACULTY

PRESIDENT HIBBEN, Chairman; PROFESSORS ABBOTT, CONKLIN, CONSTANT, FETTER, FINE, FITE, GAUSS, JONES, W. F. MAGIE, MARQUAND, MUNRO, OSGOOD, RAYCROFT, RUSSELL, SCOTT.

HISTORY OF THE UNIVERSITY

AT the beginning of the eighteenth century there were but three institutions of higher learning in the colonies; Harvard and Yale in New England and the College of William and Mary in Virginia.

In 1739 a movement was set on foot by the Synod of Philadelphia to establish a college in the Middle Colonies and a committee was appointed to carry out the plan; but, the time not being propitious, the project was laid aside without any material progress. In the meantime the Log College, founded in 1726 near the Forks of Neshaminy, Pennsylvania, by the Rev. William Tennent, Sr., a graduate of Edinburgh University and a member of the Synod of Philadelphia, had been successfully conducted as a school for candidates for the ministry. Mr. Tennent died in 1746, and at that time the project for the erection of a college, to rank with Harvard, Yale, and William and Mary was again taken up by its adherents who had withdrawn from the Synod of Philadelphia and had formed the Synod of New York. The project was successfully carried out and a charter was granted to the applicants on October 22, 1746, attested by John Hamilton, Acting Governor of the Province of New Jersey. The original trustees named in this instrument were Messrs. William Smith, Peter Van Brugh Livingston, and William Peartree Smith, and the Reverends Jonathan Dickinson, John Pierson, Ebenezer Pemberton, and Aaron Burr. By the terms of the charter these seven trustees were empowered to choose five others to complete the Board; and they elected the Reverends Gilbert Tennent, William Tennent, Jr., Samuel Blair, and Samuel Finley, graduates of the Log College, and Richard Treat, graduate of Yale College, who lived at Abington, near the Log College, to fill the vacancies.

The charter of 1746 is not of record, although a memorandum of its grant appears among the records of charters and commissions in the office of the Secretary of State at Trenton, New Jersey, and its substance is set forth in an advertisement which appeared in the *Pennsylvania Gazette* of August 13, 1747.

In the summer of 1747 Jonathan Belcher, Esq., the newly appointed Governor of New Jersey, arrived in the Colony. The original charter not being entirely satisfactory, Governor Belcher granted a second, which passed the seal of the Province on September 14, 1748. This second charter had been sought by the original Trustees in order to increase their number, to give other religious communions a share in the administration, and to make the lay trustees equal in number to those who were clergymen. Numerous doubts besides, had been expressed as to the validity of the first charter, which had been granted by the President of the Council, then acting as governor, and which had never been recorded *verbatim* in the records of the Secretary of State. After the Revolution the Charter of 1748 was confirmed and renewed by the Legislature of the State of New Jersey.

Upon the granting of the first charter measures had at once been taken to open the College, and on February 2, 1747, a notice appeared in the *New York Gazette Revived in the Weekly Post Boy,* notifying "any Person or Persons who are qualified by preparatory Learning for Admission, that some time in May next at latest, they may be there admitted to an Academic Education." On April 20, notice was given through the same journal that the Rev. Jonathan Dickinson had been elected president and the College would open in the fourth week of May, at Elizabeth-Town.

The first term of the College of New Jersey was opened at Mr. Dickinson's house. His term of administration was brief, commencing in April 1747, and closing with his death on October 7, 1747. Upon his decease the Rev. Aaron Burr assumed charge of the College, which was removed from Elizabethtown to Newark. To Mr. Burr belongs the credit for the organization of the curriculum, the ceremonies of the College and its discipline.

The first Commencement was held at Newark, November 9, 1748, and was celebrated with much ceremony. The *New York Gazette Revived in the Weekly Post Boy* published an account of the proceedings of this Commencement in detail, together with the inaugural address of President Burr. The graduating class numbered six.

A set of laws for the government of the College, probably prepared by Mr. Burr, was adopted by the Trustees at this time. They also resolved "That the annual Commencement

for the future be on the last Wednesday of September, and the next Commencement be held at New Brunswick."

In casting about for a desirable site for the location of the institution, the situation of Princeton at once commended itself, being half-way between New York and Philadelphia and upon rising ground, on the line dividing East and West Jersey. New Brunswick, however, because of its greater size and somewhat similar though not so favorable location, claimed the first consideration; and on September 26, 1750 the Trustees voted that proposals be made to both communities. At the next meeting of the Board, held in Trenton, May 15, 1751, it was voted to locate the college at New Brunswick provided the town secured to the college £1000 proclamation money, 10 acres of cleared land, and 200 acres of woodland. The citizens of New Brunswick failed to comply with these terms and it was voted, September 27, 1752, to place the college at Princeton on the same conditions.

The citizens of Princeton having complied with the terms proposed by the Board, steps were at once taken for the erection of the first college building. Plans drawn by Dr. Shippen and Robert Smith were accepted by the Trustees. These, according to the minutes of July 22, 1754, specified "That the College be built of Brick if good Brick can be made at Princeton & if Sand can be got reasonably cheap. That it be three story high & without any Cellar"; but at a subsequent meeting it was decided that stone be used for the College edifice. The land for this building was given by Nathaniel Fitz Randolph, who also donated twenty pounds currency. Ground was broken on July 29, 1754.

It was the desire of the Trustees to name the new building after the patron and benefactor of the College, Governor Belcher, but declining the compliment he requested the Board to call the edifice "Nassau Hall," as expressing "the Honour we retain, in this remote Part of the Globe to the immortal Memory of the Glorious King William the 3d., who was a Branch of the illustrious House of NASSAU." This request was complied with in the following terms:

Whereas his Excellency Govr. Belcher has signified to us, his declining to have the Edifice we have lately erected at Princeton for the Use and Service of New-Jersey College to be called after his Name, and has desired and for Good Reasons that it should be call'd after the Name of the illustrious House of NASSAU; It is therefore voted, and is hereby ordered that the sd. Edifice be in all Time to come called and be known by the name of NASSAU HALL.

The College was completed and the students removed from Newark to Princeton in the fall of 1756. The expense of erecting so large a building, the largest structure of its kind then in the colonies, had prompted the Board, in 1753, to send the Rev. Gilbert Tennent and the Rev. Samuel Davies to Great Britain to solicit funds in behalf of the institution. The money thus acquired was sufficient to defray in part the cost of the building.

The death of President Burr occurred September 24, 1757, and three days later the Trustees elected the Rev. Jonathan Edwards, of Stockbridge, Massachusetts, to fill the vacancy.

President Edwards arrived at Princeton on February 16, 1758, and assumed the duties of his office. One week later he was inoculated for small-pox and died on the 22nd of March.

On May 9, 1759, the Rev. Samuel Davies of Virginia was elected to the presidency and on July 26 entered upon the duties of his office. He died February 4, 1761.

During his administration there were no material changes in the course of instruction; more attention, however, was given to the cultivation of English composition and elocution. President Davies gave much of his time to the building up of a suitable library for the College.

The Rev. Samuel Finley of Pennsylvania had been proposed for the presidency at the meeting at which Mr. Davies was elected, and upon the death of the latter, was unanimously chosen as his successor. His administration lasted until July 17, 1766, the date of his death. During this period the course of instruction remained the same as in former years, and the College maintained a steady growth.

On November 19, 1766, the Trustees elected to the presidency, John Witherspoon, D.D., LL.D., of Paisley, Scotland. Dr. Witherspoon at first declined; a year later, however, he accepted a reëlection and became sixth President of the College.

Dr. Witherspoon was inaugurated on August 17, 1768. Among the students of this period were many who became leading figures in the Revolution and in the solution of the problems which followed the close of the war. James Madison, Aaron Burr, Gunning Bedford, William Bradford, Philip Freneau, Hugh Henry Brackenridge, Henry Lee, Morgan

Lewis, and Henry Brockholst Livingston were some of the pupils over whom Witherspoon was called to preside.

For nearly eight years the varying fortunes of the Revolution told heavily on the College. The course of instruction was interrupted by the presence of both armies, Nassau Hall was wrecked, the library scattered and destroyed, and the philosophical apparatus, including the famous orrery made by David Rittenhouse of Philadelphia, ruined. During this period but one Commencement was omitted, that of 1777. The members of the graduating class of that year, seven in number, received their degrees a few months later and are accounted graduates for that year.

College orders were regularly resumed after the enemy had abandoned occupation of the State, although the number of students did not at any time exceed ten.

The impoverished condition of the country, consequent upon the war, laid a heavy burden upon the shoulders of the President and Trustees. To the perseverance and untiring energy displayed by President Witherspoon in meeting and overcoming these difficulties the ultimate recovery of the College is largely due. He died November 15, 1794.

His successor, Samuel Stanhope Smith, D.D., LL.D., a graduate of the College in the Class of 1769, was elected to the presidency May 6, 1795. During his term of office the course of instruction was broadened and the curriculum enlarged. Important advances were the establishment of professorships in chemistry and in natural history. This was the first provision for regular instruction in these branches made by an American college. A grant of six hundred pounds per annum for three years was secured from the Legislature of the State, to reimburse the College for the damage sustained during the Revolution. This appropriation, however, was not equal by a thousand dollars to the expense of repairing the philosophical apparatus.

On March 6, 1802, Nassau Hall, save for the outer walls, was destroyed by fire, together with almost the entire library and part of the philosophical apparatus. Steps at once taken to raise funds wherewith to repair the loss were so far successful that the rebuilding of Nassau Hall was completed during the summer of 1804.

Dr. Smith resigned the presidency August 14, 1812, and was succeeded by Ashbel Green, D.D., LL.D., of the Class of

1783. Dr. Green tendered his resignation to the Trustees September 25, 1822. During this decade the College maintained a steady growth, both in the number of students and in the amount of its invested funds.

On September 26, 1822, the Trustees elected to the presidency the Rev. John Holt Rice, of Richmond, Virginia. Dr. Rice declining, the duties of the office for a time devolved upon the Vice-President, Philip Lindsley of the Class of 1804.

James Carnahan, D.D., LL.D., of the Class of 1800, was elected president on May 12, 1823, and was inaugurated August 6. During his administration of thirty-one years, sixteen hundred and thirty-four students were graduated; the Faculty was increased from two professors and two tutors, in 1823, to six professors, two assistant professors, and four tutors in 1854; and seventy-five thousand dollars was expended in the erection of new buildings, the purchase of apparatus and books, and the improvement of the College grounds.

A Department of Law was established in 1846, granting the degreee of Bachelor of Laws for two years' resident study. There being no funds available for the support of this Department, the lectures were abandoned in 1852. During this period the degree was conferred upon seven candidates.

President Carnahan resigned in 1853, but upon the request of the Board retained office until the Commencement of 1854.

John Maclean, D.D., LL.D., of the Class of 1816, was elected to the presidency December 20, 1853, and inaugurated June 28, 1854. Dr. Maclean resigned December 11, 1867, retaining the office until the Commencement of 1868. During this period the number of students increased from 247 in 1854 to 281 in 1868. The Civil War deprived the institution of a large proportion of its students and is largely responsible for the small increase. Four new professorships were established, with a total endowment of $195,000, and the teaching corps was increased to twenty. The movement to establish free scholarships in the College, undertaken during the last years of President Carnahan's administration, was successful in obtaining $60,000. The interior of Nassau Hall was destroyed by fire for the second time on March 10, 1855. The damage to the building, the walls alone standing, amounted to above $50,000 upon which there was an insurance

of $12,000. The work of rebuilding Nassau Hall was not completed until the spring of 1860.

James McCosh, D.D., LL.D., Litt.D., of Queen's College, Belfast, was elected President of the College on April 29, 1868. Dr. McCosh resigned the office in 1888, after an administration of twenty years. During this period the number of students increased from 281 to 603, and gifts amounting to upwards of three millions of dollars were contributed, of which one million was expended in the erection of fourteen buildings. Among important changes in the curriculum were the introduction of the system of elective studies (1870); the founding of the John C. Green School of Science (1873) offering courses leading to the degrees of Bachelor of Science, Civil Engineer, and Master of Science; and the establishment of the Graduate Department (1877). The Faculty was enlarged from ten professors and seven tutors in 1868 to thirty-one professors, four assistant professors, and five tutors and instructors—a total of forty—in 1888.

Francis Landey Patton, D.D., LL.D., twelfth President of the College, was elected February 9, 1888, and inaugurated June 20, 1888. President Patton resigned the office June 9, 1902. During his administration of fourteen years the student enrollment increased from 603 to 1354 and the Faculty from 40 to 100. The School of Electrical Engineering was established in 1889. Seventeen new buildings were erected during President Patton's incumbency.

In October, 1896, the one hundred and fiftieth anniversary of the signing of the First Charter of the College of New Jersey was celebrated; on the anniversary day, October 22, 1896, the title of Princeton University was assumed.

In 1900 a plan of Alumni Representation in the Board of Trustees was adopted, whereby the Board was enlarged by the addition of five Alumni Trustees, one of whom is elected each year.

Woodrow Wilson, Ph.D., Litt.D., LL.D., of the Class of 1879, was elected to the presidency in June, 1902, and inaugurated on October 25. President Wilson resigned October 20, 1910, having accepted the Democratic nomination for Governor of New Jersey. During his administration the undergraduate course of study was revised; the Preceptorial Method of instruction was established; the Faculty was strengthened; the facilities of the University were increased by the erection

of an additional recitation hall and laboratories for physics, electrical engineering, biology, and geology; several new dormitories were erected; and large endowments were received for the development of the Graduate School.

On October 20, 1910, the Hon. John Aikman Stewart, LL.D., Senior Trustee, was appointed President *pro tempore,* and held the office until the election of President Hibben. During his administration he was aided in the performance of the academic duties of the presidency by Henry Burchard Fine, Ph.D., LL.D., Dean of the Faculty.

John Grier Hibben, Ph.D., LL.D., of the Class of 1882, was elected President on January 11, 1912, and formally inaugurated on May 11. In 1917 the Board of Trustees was enlarged by the addition of three members to be known as Regional Trustees, one of whom is elected annually to serve three years.

The title of the Corporation as now constituted is The Trustees of Princeton University.

The Board consists of thirty-five members as follows: The Governor of the State, the President of the University elected by the Board, twenty-five Life Trustees elected by the Board, five Alumni Trustees elected by the alumni of the University, and three Regional Trustees elected by the Board.

The seal of the University is a shield resting upon a circle; in the upper part of the shield is an open Bible with Latin characters signifying the Old and New Testament; in the lower part a chevron denoting the rafters of a building; in the spaces between the sides of the shield and the circle the motto "Dei sub numine viget"; on the outside of the circle, "Sigillum Universitatis Princetoniensis."

By resolution of the Board of Trustees the use of the seal of the University is prohibited on all publications, manufactured articles, etc., except where specially authorized by the University.

GROUNDS AND BUILDINGS

THE University campus consists roughly of four tracts of land adjoining each other. The central portion, of about two hundred and four acres, forms a quadrangle bounded by Nassau Street on the north, Washington Road on the east, Lake Carnegie on the south, and the line of the Pennsylvania railroad on the west.

The western portion, known as Springdale Farm, which was presented to the University in 1905, consists of two hundred and thirty-one acres, lying between the Theological Seminary and Stony Brook.

The third portion, known as the Olden Farm, lying on the eastern side of Washington Road, was also presented to the University in 1905. It consists of ninety-three acres and includes Laughlin Field and the woodland lying between the line of the clubs on Prospect Avenue and the lake.

The fourth portion, which bears the name of the Butler Tract, was presented to the University in 1912. It lies next to a piece of land owned by the Lake Carnegie Association adjoining the Olden Farm, and contains upwards of ninety-three acres. The Butler Tract, together with the land of the Lake Carnegie Association, forms a continuous property of about four hundred and thirty acres, with a frontage of over a mile and a half on Lake Carnegie. The trustees of the Lake Carnegie Association are required to be either alumni, Trustees, or members of the Faculty of Princeton University, and their property is held in the interest of the University.

Nassau Hall, the oldest and historically the most interesting building on college property, was at the time of its completion in 1756, the largest academic building in the colonies. It was designed by Robert Smith of Philadelphia and was built of sandstone quarried in the neighborhood. At the suggestion of Governor Belcher, it was named in honor of William of Nassau, Prince of Orange, William III of England. During the Revolution it served at different times as hospital and barracks for American and British troops. The first Legislature of the State of New Jersey met here in 1776 and the first Governor of the State was inducted into office and the

Great Seal of the State adopted. Here from June to November 1783 the Continental Congress sat, and here on August 26, Washington received the thanks of Congress for his conduct of the War. In October the Hon. Peter Van Berckel, the first foreign minister accredited to the United States after independence had been acknowledged, was received here by Congress.

The east wing contains the offices of the President, the Secretary, the Executive Secretary, the Dean of the College, the Registrar, the Supervisor of Freshmen, and the Bureau of Appointments and Student Employment. The west wing contains the office of the Dean of the Graduate School and several private offices. On the third floor of the west wing are the laboratories of the Department of Psychology.

The entrance hall has been remodelled into a Memorial Hall in memory of Princeton men who lost their lives in the World War and other wars of this country. This hall leads directly into the larger hall which was originally the chapel but is now the assembly room where the meetings of the University Faculty are held. The Faculty Room was remodelled and furnished in 1906 as a memorial to Nathaniel FitzRandolph, donor of the land on which Nassau Hall stands.

The *FitzRandolph Gateway* on Nassau Street, facing Nassau Hall, was erected in 1905 by the late Augustus Van Wickle, Esq., also in memory of his ancestor Nathaniel FitzRandolph. It was designed by McKim, Mead and White, and forms the main entrance to the Campus from Nassau Street.

The *Dean's House,* northwest of Nassau Hall, on Nassau Street, was erected in 1756 as a house for the president of the college, and continued to be so used until 1878 when Prospect was acquired. Since the creation of the office of Dean of the Faculty the house has been the official residence of the Dean.

Stanhope Hall was erected in 1803 to contain recitation rooms, the library, and quarters for the American Whig and the Cliosophic Societies. It now contains the offices of the Treasurer, the Controller, and the University Power Company. In the basement are the offices of the college police. The building is named after President S. Stanhope Smith, Class of 1769.

Joseph Henry House was built in 1837 for Professor Joseph Henry and originally stood on the opposite side of the campus, where Reunion is now located, from which site it was moved

in 1870. It is the official residence of the Dean of the College.

Prospect, the residence of the President, was not acquired by the University until 1878. The mansion was erected in 1849 and occupies the site of the eighteenth century house of Colonel George Morgan, of Princeton, gentleman farmer, Indian agent, and pioneer western explorer.

The *School of Science Building,* erected in 1873 and equipped by John C. Green, Esq., is devoted to the purposes of instruction in the Department of Civil Engineering. On the first and second floors are located the lecture and drawing rooms and the departmental library. In the basement are further recitation rooms and the machine shops. It is connected with the dynamo building of the School of Electrical Engineering.

McCosh Hall was erected in 1907 in memory of President McCosh and forms one side of a contemplated quadrangle. It was designed by Raleigh C. Gildersleeve and contains eighteen lecture and recitation rooms and twenty-six rooms for preceptorial conferences. The University Stock Room is located in the basement. The sundial in the court of McCosh Hall is a replica of the Turnbull sundial at Corpus Christi College, Oxford, and was erected in 1907, the gift of the Right Honorable Sir William Mather of London (Princeton hon. 1905).

Alexander Hall, the gift of Mrs. Charles B. Alexander, is used for Commencement exercises, public lectures, concerts, and other University gatherings of a general character. The mosaic wall pictures by J. A. Holzer are illustrative of Homeric Story. The building was designed by William A. Potter and is decorated with sculptures by J. Massey Rhind.

The University Sunday services are held in Alexander Hall, the week-day chapel services being held in Murray-Dodge Hall.

DORMITORIES

West College, built in 1836, is the oldest dormitory still standing. It forms the western side of the central quadrangle behind Nassau Hall and contains rooms for sixty-four students.

Reunion Hall, erected in 1870 on the site of Professor Joseph Henry's house and named to commemorate the reunion of the Old and New Schools of the Presbyterian Church, accommodates sixty-five students.

Witherspoon Hall, named after the President, was built in 1877, and has rooms for eighty students.

Edwards Hall is named after President Jonathan Edwards and houses eighty-two students. It was built in 1880.

Albert B. Dod Hall, the gift of Mrs. David Brown, was erected in 1890 in memory of her brother, Albert Baldwin Dod, of the Class of 1822. The building contains seventy-seven rooms and was designed by John Lyman Faxon.

David Brown Hall, also a gift of Mrs. Brown, was built in 1891 in memory of her husband. It was designed by John Lyman Faxon and has rooms for eighty-six students.

Blair Hall, a Sesquicentennial gift of the Hon. John Insley Blair, and designed by Messrs. Cope and Stewardson, was the first representative of the English Collegiate Gothic style of architecture adopted for future Princeton buildings. The dormitory accommodates one hundred and fifteen students. The massive central tower is pierced by an archway which forms the main entrance to the Campus from the southwest. An addition on University Place, with a gateway tower, was erected by De Witt Clinton Blair, of the Class of 1856.

Adjoining the southern end of Blair is *Stafford Little Hall,* a dormitory for one hundred and ten students, the gift of Henry Stafford Little, of the Class of 1844. It was erected partly in 1899 and completed in 1902 from the designs of Messrs. Cope and Stewardson.

The *Upper* and *Lower Pyne Buildings* on Nassau Street opposite the Campus, were erected in 1896 by M. Taylor Pyne, of the Class of 1877. They were designed by Raleigh C. Gildersleeve and accommodate nineteen and eighteen students respectively.

Seventy-Nine Hall, a gift of Class of 1879, was designed by Benjamin W. Morris and contains rooms for forty-eight students.

Patton Hall, with rooms for one hundred and three men, was the gift of the ten classes from 1892 to 1901 inclusive, and was named after President Patton. The building was erected in 1906 from the plans of Benjamin W. Morris.

Campbell Hall was the gift of the Class of 1877 and is named after John A. Campbell, president of the Class. It was designed by Messrs. Cram, Goodhue and Ferguson and has rooms for sixty men.

Hamilton Hall, built in 1911 from the designs of Messrs. Day Brothers and Klauder, adjoins Holder on the southwest and accommodates forty-one students. It was built by the generosity chiefly of the Classes of 1884 and 1885 and was named for Acting Governor John Hamilton who granted the first Charter of the College.

Cuyler Hall adjoins Patton and was built in 1912 from the designs of Messrs. Day Brothers and Klauder. It was named in memory of Cornelius C. Cuyler of the Class of 1879. Five of the six entries are the gifts of the Classes of 1881, 1882 and 1891 and of William E. Guy, of the Class of 1865 and J. O. H. Pitney, of the Class of 1881. The southeast corner entry was contributed by a number of alumni.

The northwest corner of the Campus is occupied by a group of buildings, the eastern section of which forms the dormitory named *Holder Hall* and the western section the University Dining Halls, named *Madison Hall. Holder Hall,* forming four sides of a large quadrangle together with the great Tower on Nassau Street, was built by the generosity of Mrs. Russell Sage from the designs of Messrs. Day Brothers and Klauder. Three sides are available for the use of students, of whom one hundred and forty-nine can be accommodated. The fourth side is a cloister, forming a wall which serves as the eastern end of Madison Hall. The building was named by Mrs. Sage in memory of her ancestor Christopher Holder.

Madison Hall, named for James Madison of the Class of 1771, consists of a building adjoining Holder, another on Nassau Street and a third on University Place, each containing two dining halls, and all joined by corridors to a central kitchen building in the rear of the Nassau Street unit. Madison Hall was erected through the further generosity of Mrs. Russell Sage, and subscriptions from the undergraduate classes of 1916, 1917 and 1918, and a large number of alumni and friends of the University.

Pyne Hall is the first of a new group of four dormitories to be constructed on the western side of the Campus. It was named in memory of M. Taylor Pyne of the Class of 1877 and for thirty-six years a Trustee of the University. Seven of the entries are gifts of the Classes of 1902, 1906, 1908, 1920, 1921, 1922, and 1923. The building will be completed in 1922 and will accommodate one hundred and seventy students. It was designed by Messrs. Day & Klauder.

THE GRADUATE COLLEGE

The buildings comprising the Graduate College will be listed in Part IX of this catalogue.

LIBRARIES

The University Library and other library facilities are described in Part VII of this catalogue.

LABORATORIES AND MUSEUMS

The *Civil Engineering Laboratories* are situated in the School of Science Building and in a separate building provided by the generosity of the trustees of the John C. Green Estate. The latter building is equipped with apparatus for the laboratory work of engineers and contains the cement testing, materials testing, hydraulic and heat engines laboratories.

The buildings and equipment of the *School of Electrical Engineering* are described in Part IX of this catalogue.

The *Observatories*, the *Palmer Physical Laboratory*, the *Chemical Laboratory*, the *Psychological Laboratory*, and the museums and collections in natural science, with the biological and geological laboratories, the *Vivarium*, and the general equipment of *Guyot Hall*, in which the Department of Biology and Geology are housed, are described in Part IX of this Catalogue.

The *Museum of Historic Art* contains, besides the large Marquand Library of books and several thousand photographs and slides of art monuments, collections illustrating the history and processes of the graphic arts, collections of Greek and Roman coins, gems, and marbles, a collection of bronze medals and casts of ivories from the Roman to the Gothic period, a series of casts from the Arch of Trajan, and a small collection of paintings. One room, devoted to the results of the Princeton Expeditions to Syria, exhibits besides casts of sculpture and inscriptions, many examples of Syrian workmanship in stone, terra cotta, glass, bronze and gold. In the central story the Trumbull Prime Collection illustrates the history of pottery and porcelain. The Collection is richest in examples of European wares. A smaller room contains the Livingston Collection of pottery, noteworthy for its material on the early history of this country. The Museum also con-

tains the Class of 1881 Collection of ancient, medieval and Renaissance sculpture.

McCormick Hall, is the gift of Mrs. Cyrus H. McCormick, Sr. and her sons and grandsons, and is for the use of the School of Architecture. It will adjoin the western side of the present Art Museum. This building is from the design of Messrs. Cram & Ferguson and will be completed in 1922.

LITERARY SOCIETIES

The Cliosophic and American Whig Societies were founded prior to the Revolution. They occupy two marble buildings on the campus, containing auditoriums, reading and lounging rooms, and libraries. They are managed by undergraduates, but include in their membership most of the graduates and officers of the University. They follow the usual course of literary societies, awarding numerous prizes—some of exceptional value—for orations, essays, and debates, and conferring diplomas on those who complete the prescribed courses. Older graduates of Princeton have considered the training of the Halls one of the most valuable parts of their college experience. A freshman course in public speaking and debate under expert direction and official sanction, open only to Hall members, is now conducted in the Halls, under the direction of the Department of English, as an alternate to the regular freshman course in English literature. This course is specially planned for students looking forward to public careers. A vigorous competition for University honors has always prevailed between the two societies and it is from their representatives that the intercollegiate debating teams are selected which meet representatives from Yale and Harvard each year in a triangular debate. The Halls also provide their members with the advantages of social clubs, which are especially appreciated by the freshmen and sophomores, and by the juniors and seniors who are not connected with the upperclass clubs. Probably half the student body are members of one or the other of the Halls. Until recently these societies were secret, but they now have an agreement whereby members of each society enjoy free access to the building of the other.

ATHLETIC GROUNDS AND BUILDINGS

University Field is used chiefly for baseball. The entrance gateway on William Street is the gift of Cyrus H. McCormick,

of the Class of 1879. The *Ferris Thompson Wall and Gateway* on Prospect Avenue, designed by McKim, Mead and White, were the gifts of Ferris S. Thompson of the Class of 1888. In connection with the Field are the *Osborn Club House,* presented by Henry F. Osborn of the Class of 1877, the *Cage* of indoor practice, and the *Field House* containing dressing rooms, lockers and baths; and the open stands built by alumni subscriptions.

The *Brokaw Memorial Building* was erected in 1892 by Irving V. Brokaw, Esq., of New York, in memory of his son Frederick Brokaw, of the Class of 1892. One wing which is architecturally connected with the Gymnasium, contains a concrete swimming pool 100 feet long by 25 feet wide. The building also contains hand ball courts and dressing rooms. It fronts upon Brokaw Field.

The *Gymnasium,* erected by alumni contributions, conforms in style to the collegiate Gothic of Blair, Little and Patton Halls. The main entrance opens into a trophy hall around which are the offices of the Department of Hygiene and Physical Education, a physical examination room, and rooms for fencing, boxing and wrestling. The Gymnasium proper, 166 feet long by 101 feet wide, is entered through the trophy hall. About its walls is an elevated running track of twelve laps to the mile. The building is also equipped with locker and dressing rooms, hot and cold shower baths, handball courts, and a rowing room with sixteen machines.

Brokaw Field was provided by the alumni for the benefit of undergraduates not members of university teams. It contains three baseball diamonds and a 120-yard straightaway running-track.

Goldie Field, named after Mr. George Goldie for many years Director of the Gymnasium, closely adjoins Brokaw Field and contains a baseball diamond and three soccer fields. Twenty-eight tennis courts occupy the terraces bordering these fields.

Poe Field, laid out in 1916 in memory of John Prentiss Poe of the Class of 1895, provides space for two baseball diamonds or three football fields. The outdoor compulsory exercise under the direction of the Department of Hygiene and Physical Education, which forms part of the work of each freshman, is followed out on these fields.

The *Class of 1886 Memorial Building* presented to the University by that Class is located on the Princeton Golf course. It contains ample provision in the way of bathing and locker facilities, reception rooms, etc., for the use of the Princeton Golf Club, with dormitory and kitchen equipment for members of the Class of 1886 during their reunions. Students of the University are eligible to membership in the Golf Club on payment of the regular dues. The eighteen-hole course covers 225 acres and is on University property.

The *Class of 1887 Boat House* was completed in 1913 from the designs of Pennington Satterthwaite, of the Class of 1893. It is situated on Lake Carnegie at the foot of Washington Road. The first floor has room for thirty-two shells, and a workshop. The second floor has locker rooms, a club room, and an office.

The *Palmer Memorial Stadium* was erected in 1914 by Edgar Palmer, of the Class of 1903, in memory of his father Stephen S. Palmer, Esq., a trustee and generous benefactor of the University. It is a U-shaped structure with the open end towards the south and is built of reinforced concrete, seating about forty-one thousand persons. The Stadium was designed by H. J. Hardenburgh.

The *Nineteen Eleven Football Team House,* near the Stadium, was a gift of Cyrus H. McCormick, of the Class of 1879, as a memorial to the team of 1911. It provides dressing rooms for football and track teams, and was designed also by H. J. Hardenburgh.

PART I

OFFICERS OF INSTRUCTION

OFFICERS OF INSTRUCTION

FACULTY AND INSTRUCTORS

The Faculty list is arranged in five groups: professors, associate professors, assistant professors, lecturers, and instructors. To this list is added that of the assistants in instruction. In each group the names occur in order of seniority of appointment.

JOHN GRIER HIBBEN, PH.D., LL.D., LITT.D. Prospect
President
Stuart Professor of Philosophy

FRANCIS LANDEY PATTON, D.D., LL.D. Hamilton, Bermuda
Ex-President
Stuart Professor of Ethics and the
Philosophy of Religion, Emeritus

CHARLES MCMILLAN, A.M., C.E. 40 Bayard Lane
Professor of Civil Engineering, Emeritus

THEODORE WHITEFIELD HUNT, PH.D., L.H.D. 72 Library Place
Professor of English, Emeritus

WILLIAM LIBBEY, D.Sc. Thanet Lodge
Professor of Physical Geography and Director of the
E. M. Museum of Geology and Archaeology

WILLIAM BERRYMAN SCOTT, PH.D., LL.D. 114 Broadmead
Sc.D. (Harv. et Oxon.)
Blair Professor of Geology

FREDERICK NEWTON WILLSON, A.M., C.E.
P. O. Box 63, Princeton, N. J.
Professor of Graphics

ALLAN MARQUAND, PH.D., L.H.D. Guernsey Hall
Professor of Art and Archaeology and Director of the
Museum of Historic Art

ANDREW FLEMING WEST, PH.D., LL.D., HON. D.LITT., (OXON.)
Wyman House, Graduate College
Dean of the Graduate School
Giger Professor of Latin

HERMAN CARL OTTO HUSS, PH.D.
Professor of Modern Languages and Literature, Emeritus

HENRY BURCHARD FINE, PH.D., LL.D. — 200 Mercer St.
Dean of the Departments of Science
Dod Professor of Mathematics

†JOHN HOWELL WESTCOTT, PH.D.
Musgrave Professor of Latin and Tutor in Roman Law

WILLIAM FRANCIS MAGIE, PH.D., LL.D. — The Dean's House
Dean of the Faculty
Henry Professor of Physics

ERNEST CUSHING RICHARDSON, PH.D. — 220 Mercer St.
Director, University Library

LEROY WILEY MCCAY, D.SC. — 12 Morven St.
Professor of Chemistry

†HENRY DALLAS THOMPSON, D.SC., PH.D.
Professor of Mathematics

GEORGE MCLEAN HARPER, PH.D. — 36 Mercer St.
Holmes Professor of Belles Lettres and
English Language and Literature

†PAUL VAN DYKE, D.D. — Graduate College
Pyne Professor of History

HERBERT STEARNS SQUIER SMITH, C.E. — 16 Dickinson St.
Professor of Civil Engineering

WALTER BUTLER HARRIS, C.E. — Greenholm
Professor of Geodesy

HENRY VAN DYKE, D.D., LL.D. (Geneva), HON. D.C.L. (Oxon.) — 59 Bayard Lane
Murray Professor of English Literature

ELMER HOWARD LOOMIS, PH.D., D.SC. — 302 Nassau St.
Professor of Physics

WALTER MEAD RANKIN, PH.D. — 5 Evelyn Place
Curator of the Herbarium
Professor of Biology

CHARLES FREEMAN WILLIAMS MCCLURE, D.SC. — 12 Morven St.
Class of 1877 Professor of Zoology

HOWARD CROSBY WARREN, PH.D. — 133 Library Place
Director of the Psychological Laboratory
Stuart Professor of Psychology

THOMAS MARC PARROTT, PH.D. — 104 Mercer St.
Professor of English

† Absent on leave.

†Edmund Yard Robbins, A.M.
Ewing Professor of Greek Language and Literature

Alexander Hamilton Phillips, D.Sc. 54 Hodge Road
Professor of Mineralogy

Fred Neher, A.M. 148 Library Place
Professor of Organic Chemistry

Williamson Updike Vreeland, D. ès L. 180 Mercer St.
Woodhull Professor of Romance Languages

William Kelly Prentice, Ph.D. 12 Nassau St.
Professor of Greek

Charles Henry Smyth, Jr., Ph.D. 22 Morven St.
Professor of Geology

Howard Crosby Butler, A.M. Pyne Tower, Graduate College
Director of the School of Architecture
Professor of the History of Architecture

Howard McClenahan, E.E., M.S., LL.D.
Joseph Henry House, College Place
Dean of the College
Professor of Physics

Augustus Trowbridge, Ph.D. Hodge Rd.
Professor of Physics

Duane Reed Stuart, Ph.D. 108 Mercer St.
Professor of Classics

Christian Gauss, A.M., Litt.D. 106 Fitz Randolph Rd.
Professor of Modern Languages

Edward Capps, Ph.D., LL.D. 150 Fitz Randolph Rd.
Professor of Classics

Edwin Grant Conklin, Ph.D., D.Sc. 139 Broadmead
Professor of Biology

Frank Frost Abbott, Ph.D. 62 Battle Road
Kennedy Professor of Latin Language and Literature

Henry Jones Ford, LL.D. 44 Mercer St.
Professor of Politics

Malcolm MacLaren, E.E., A.M. 38 Washington Road
Professor of Electrical Engineering

Edwin Plimpton Adams, Ph.D. 12 Nassau St.
Professor of Physics

---

† Absent on leave.

LUTHER PFAHLER EISENHART, PH.D., Sc.D. 25 Alexander St.
Professor of Mathematics

GEORGE AUGUSTUS HULETT, PH.D. 44 Washington Rd.
Professor of Physical Chemistry

WILLIAM FOSTER, PH.D. 41 Battle Road
Professor of Chemistry

ROGER BRUCE CASH JOHNSON, PH.D. 129 Broadmead
Professor of Philosophy

ROBERT McELROY, PH.D., LL.D. 25 Bayard Lane
Edwards Professor of American History

FRANK JEWETT MATHER, JR., PH.D., L.H.D. 3 Evelyn Pl.
Marquand Professor of Art and Archaeology

OSWALD VEBLEN, PH.D. 58 Battle Rd.
Professor of Mathematics

EDWARD SAMUEL CORWIN, PH.D. 115 Prospect Ave.
McCormick Professor of Jurisprudence

HARRY FRANKLIN COVINGTON, A.M. 53 Battle Road
Professor of Public Speaking and Debate

ULRIC DAHLGREN, M.S. 7 Evelyn Place
Professor of Biology

FRANK ALBERT FETTER, PH.D., LL.D. 121 Broadmead
Professor of Political Economy

WILLIAM GILLESPIE, PH.D. 12 Bank St.
Professor of Mathematics

DAVID MAGIE, PH.D. 101 Library Place
Professor of Classics

JOSEPH EDWARD RAYCROFT, A.B., M.D. 298 Nassau St.
Director of the Department of Physical Education
Professor of Hygiene and Physical Education

HENRY NORRIS RUSSELL, PH.D. 79 Alexander St.
Director of the Observatory
Professor of Astronomy

JOHN DUNCAN SPAETH, PH.D., LITT.D. 32 Edgehill St.
Professor of English

DOUGLAS LABAREE BUFFUM, PH.D. 60 Hodge Road
Professor of Romanic Languages and Literature

VARNUM LANSING COLLINS, A.M. 51 Graduate College
Secretary of the University
Clerk of the Faculty
Professor of the French Language and Literature

JOHN PRESTON HOSKINS, PH.D. 22 Bank St.
Professor of Germanic Languages and Literature

MAX FRIEDRICH BLAU, PH.D. 42 Princeton Ave.
Professor of Germanic Languages and Literature

*GEORGE MADISON PRIEST, PH.D.
Professor of Germanic Languages and Literature

‡EDWIN WALTER KEMMERER, PH.D. 128 Fitz Randolph Road
Professor of Economics and Finance

GEORGE BRINTON MCCLELLAN, A.M., LL.D. Battle Road
Professor of Economic History

ARCHIBALD ALLAN BOWMAN, M.A. 138 Fitz Randolph Road
Professor of Logic

CHARLES GROSVENOR OSGOOD, PH.D. 92 Stockton St.
Professor of English

EDWARD GLEASON SPAULDING, PH.D., LL.D. 8 Edgehill St.
Professor of Philosophy

ALAN WILFRID CRANBROOK MENZIES, PH.D. 187 Prospect Ave.
Professor of Chemistry

ALFRED NOYES, M.A., C.B.E.
Visiting Professor of English

FRANK HENRY CONSTANT, C.E., D.Sc. 57 Battle Road
Professor of Civil Engineering

DANA CARLETON MUNRO, A.M., L.H.D. 119 Fitz Randolph Road
Dodge Professor of Mediaeval History

GEORGE HARRISON SHULL, PH.D. 60 Jefferson Road
Professor of Botany and Genetics

†PHILIP MARSHALL BROWN, A.M., LL.D.
Professor of International Law

WARNER FITE, PH.D. 64 Nassau St.
Stuart Professor of Ethics

GORDON HALL GEROULD, B.LITT. 341 Nassau St.
Professor of English

ROBERT KILBURN ROOT, PH.D. 31 Chambers St.
Professor of English

CHARLES CARROLL MARDEN, PH.D. 112 Mercer St.
Emory L. Ford Professor of Spanish

---

* Absent on leave.

† Absent on leave, First Term.

‡ Absent on leave, Second Term.

EDWARD COOKE ARMSTRONG, PH.D., LL.D. 26 Edgehill St.
Professor of the French Language

WILLIAM STARR MYERS, PH.D. 104 Bayard Lane
Professor of Politics

HAROLD HERMAN BENDER, PH.D. 190 Fitz Randolph Road
Professor of Indo-Germanic Philology

CHARLES RUFUS MOREY, A.M. 342 Nassau St.
Professor of Art and Archaeology

DAVID ALOYSIUS MCCABE, PH.D. 248 Cuyler Hall
Professor of Economics

DONALD CLIVE STUART, PH.D. The Western Way
Professor of Dramatic Literature

MAJOR JOHN EUGENE MCMAHON, Field Artillery 152 Nassau St.
Professor of Military Science and Tactics

FRANK HAIGH DIXON, PH.D. 101 Broadmead
Professor of Economics

FREDERICK LEROY HUTSON, PH.D. 42 Cleveland Lane
Registrar

HEREWARD LESTER COOKE, M.A. 148 Mercer St.
Professor of Physics

KARL TAYLOR COMPTON, PH.D. 80 Linden Lane
Professor of Physics

E. NEWTON HARVEY, PH.D. 44 Jefferson Road
Professor of Physiology

ROBERT WILLIAM ROGERS, PH.D., S.T.D., LL.D., HON. D.LITT. (Dublin)
Madison, N. J.
Visiting Professor of Ancient Literature
on the William Paton Foundation

RAYMOND SMITH DUGAN, PH.D. 16 Prospect Ave.
Professor of Astronomy

LAUDER WILLIAM JONES, PH.D. Peacock Inn
A. Barton Hepburn Professor of Organic Chemistry

JAMES THAYER GEROULD, A.B. 55 Battle Road
Librarian

MORRIS WILLIAM CROLL, PH.D. 7½ Greenholm
Professor of English

CHARLES WILLIAM KENNEDY, PH.D. 66 Battle Road
Professor of English

ARTHUR MAURICE GREENE, JR., D.Sc. Troy, N. Y.
Dean of the School of Engineering
Professor of Mechanical Engineering

†HENRY ROBINSON SHIPMAN, PH.D. 27 Mercer St.
Associate Professor of History and Politics

CHARLES RANALD MACINNES, PH.D. 12 Vandeventer Ave.
Associate Professor of Mathematics

HORACE CRAIG LONGWELL, PH.D. 91 Mercer St.
Associate Professor of Philosophy

THOMAS JEFFERSON WERTENBAKER, PH.D. 111 Fitz Randolph Road
Associate Professor of History

JOHN WILLIAM BASORE, PH.D. 101 Library Pl.
Associate Professor of Classics

FRANCIS CHARLES MACDONALD, A.B. Nassau Inn
Associate Professor of English

HARVEY WATERMAN THAYER, PH.D. 12 Nassau St.
Associate Professor of Modern Languages

GILBERT VAN INGEN 115 Broadmead
Curator of Invertebrate Palaeontology
Associate Professor Geology

JOSEPH HENRY MACLAGAN WEDDERBURN, D.Sc. 106 Nassau St.
Associate Professor of Mathematics

GEORGE ERLE BEGGS, A.B., C.E. 78 Jefferson Road
Associate Professor of Civil Engineering

HUGH STOTT TAYLOR, D.Sc. 159 Nassau St.
Associate Professor of Physical Chemistry

GEORGE WICKER ELDERKIN, PH.D. The Bachelors
Associate Professor of Art and Archaeology

HENRY CLAY MCCOMAS, PH.D. 109 Broadmead
Associate Professor of Psychology

FRANK LINLEY CRITCHLOW, PH.D. 86 University Place
Assistant Professor, Preceptor in Modern Languages

WILLIAM KOREN, A.M. 105 Fitz Randolph Road
Assistant Professor, Preceptor in Modern Languages

MARCUS STULTS FARR, D.Sc. 20 Vandeventer Ave.
Assistant Professor, Preceptor in Geology

GEORGE TAPLEY WHITNEY, PH.D. 38 Jefferson Road
Assistant Professor, Preceptor in Philosophy

† Absent on leave, Second Term.

DONALD PRITCHARD SMITH, PH.D. 90 Bayard Lane
Assistant Professor of Chemistry

RADCLIFFE HEERMANCE, A.M. 298 Nassau St.
Supervisor of Freshmen
Assistant Professor, Preceptor in English

ALLAN CHESTER JOHNSON, PH.D. 37 Bank St.
Assistant Professor, Preceptor in Classics

HERBERT SPENCER MURCH, PH.D. 6A Holder Hall
Assistant Professor, Preceptor in English

CLIFTON RUMERY HALL, PH.D. 152 Graduate College
Assistant Professor, Preceptor in History and Politics

WALTER PHELPS HALL, PH.D. 363 Cuyler Hall
Assistant Professor, Preceptor in History and Politics

CHALFANT ROBINSON, PH.D. 144 Library Place
Curator of Mediaeval History

ROBERT MAXWELL SCOON, B.A., PH.D. 19 Cleveland Lane
Assistant Professor, Preceptor in Classics

HENRY BARTLETT VAN HOESEN, PH.D. 16 Linden Lane
Assistant Librarian

LEWIS ROBINSON CARY, PH.D. 36 Wiggins St.
Assistant Professor of Biology

HENRY BRONSON DEWING, PH.D. 12 Edgehill St.
Assistant Professor, Preceptor in Classics

WILLIAM JOHN SINCLAIR, PH.D. 154 Prospect Ave.
Curator of Vertebrate Palaeontology
Assistant Professor, Preceptor in Geology

NORMAN BROWN TOOKER, A.B., M.D. 159 Library Place
Assistant Professor of Hygiene and Physical Education

ANSON ELY MORSE, PH.D. 269 Nassau St.
Assistant Professor of History

STANLEY EDWIN HOWARD, PH.D. 35 Jefferson Road
Assistant Professor of Economics

LOUIS CONS, LIC. ÈS LETTRES 84 Alexander St.
Assistant Professor of Modern Languages

EARL BALDWIN SMITH, PH.D. 11 Cleveland Lane
Assistant Professor of Art and Archaeology

SHERLEY WARNER MORGAN, A.B., B.ARCH. 12 Boudinot St.
Assistant Professor of Architecture

SHIRLEY HOWARD WEBER, PH.D. 106 Broadmead
Assistant Professor of Classics

NATHANIEL HOWELL FURMAN, PH.D. 61 Wiggins St.
Assistant Professor of Chemistry

PERCY ADDISON CHAPMAN, A.M. 293 Nassau St.
Assistant Professor of Modern Languages

CHARLES LESLIE FLEECE, A.M. 45 Patton Ave.
Assistant Professor of Chemistry

SAMUEL SHELLABARGER, PH.D., 7 Greenholm
Assistant Professor, Preceptor in English

CHARLES WILLIAM HENDEL, JR., PH.D. 76 Murray Place
Assistant Professor of Philosophy

JOSEPH COY GREEN, A.M. 321 Nassau St.
Assistant Professor of History and Politics

ARTHUR FRANCIS BUDDINGTON, PH.D. 15 D Graduate College
Curator of Petrology and Economic Geology
Assistant Professor of Geology

DONALD BUNKER SINCLAIR, M.D. 400 Nassau St.
Assistant Professor of Hygiene and Physical Education

CARL CAMPBELL BRIGHAM, PH.D. The Bachelors
Assistant Professor of Psychology

JAMES WADDELL ALEXANDER, PH.D. 29 Cleveland Lane
Assistant Professor of Mathematics

BENJAMIN FRANKLIN HOWELL, PH.D. 54 Patton Ave.
Assistant Professor of Geology
Assistant Curator of Invertebrate Palaeontology

THOMAS JAMES BROWNE, A.M. 110 Moore St.
Assistant Professor of Hygiene and Physical Education

CAPTAIN ARTHUR C. WATERS, Field Artillery 146 Nassau St.
Assistant Professor of Military Science and Tactics

CAPTAIN JAMES W. ANDREWS, Field Artillery 106 Nassau St.
Assistant Professor of Military Science and Tactics

LIEUTENANT ROBERT JOHNSON HORR, Field Artillery Nassau Club
Assistant Professor of Military Science and Tactics

JOHN QUINCY STEWART, PH.D. 14 Prospect Ave.
Assistant Professor of Astronomical Physics

EDWIN AVERY PARK 22 Alexander St.
Assistant Professor of Art and Archaeology

WILLIAM SEAL CARPENTER, PH.D. 261 Cuyler Hall
Assistant Professor of History and Politics

FRANK DUNSTONE GRAHAM, PH.D. 64 Nassau St.
Assistant Professor of Economics and Social Institutions

LIEUTENANT ARTHUR EUGENE FOX, Field Artillery 47 Murray Place
Assistant Professor of Military Science and Tactics

STEWART PATON, M.D. Kingston Road, Lake Carnegie
Lecturer on Neuro-Biology

HENRY LANE ENO, A.B. LL.B. 78 Stockton St.
Research Associate in Psychology

ALFRED GOLDSBOROUGH MAYOR, Sc.D. Princeton, N. J.
Lecturer on Biology

ALEXANDER RUSSELL, MUS.DOC., A.G.O. 160 W. 95th St. New York City
Director of Music and University Organist

HENRY ANDREWS COTTON, A.M., M.D. State Hospital, Trenton, N. J.
Lecturer on Psychopathology

PAUL ELMER MORE, A.M., LITT.D., LL.D. 245 Nassau St.
Lecturer on Greek Philosophy

WILLIAM WOODBURN POTTER, B.S.
1710 Real Estate Trust Building, Philadelphia, Pa.
Lecturer on Architecture

THEODORE LESLIE SHEAR, PH.D. 211 No. Broadway, Yonkers, N. Y.
Lecturer on Art and Archaeology

CHARLES HENRY ROGERS, LITT.B. Nassau Inn
Curator of the Museum of Zoology

HOWARD SEAVOY LEACH, A.M. 122 Graduate College
Reference Librarian

DAYTON VOORHEES, A.M. 151 Library Pl.
Instructor in History and Politics

LAURENCE LADD BUERMEYER, PH.D. 106 Nassau St.
Instructor in Philosophy

SHELDON JENCKES HOWE, A.M. 80 University Pl.
Instructor in History and Politics

WALTER VAN BRAAM ROBERTS, E.E. 210 Palmer Laboratory
Instructor in Electrical Engineering

ALBERT BOERSIG NIES 41 Jefferson Road
Instructor in Physical Education

EDWARD PECK CULVER, B.E. 93 Graduate College
Instructor in Civil Engineering

JOHN COLT, A.M. 162 Mercer St.
Instructor in History and Politics

NEMOURS HONORÉ CLEMENT, A.M. 40 Patton Ave.
Instructor in French

MELVIN EUGENE BASSETT, A.B. 24 Dickinson St.
Instructor in Modern Languages

ORESTES VERA, BR. HU. 10 A Graduate College
Instructor in Modern Languages

FREDERICK COURTNEY TARR, PH.D. 206 Nassau St.
Instructor in Modern Languages

WALTER SCOTT HASTINGS, PH.D. 17 Edwards Place
Instructor in Modern Languages

GEORGE EMIL RAYNOR, A.M. 31 William St.
Instructor in Mathematics

GUY BLANDIN COLBURN, PH.D. 69 Harrison St.
Instructor in Modern Languages

WILLIAM ERSKINE CLELAND, A.M. 11 B Graduate College
Instructor in Mathematics

GREGG DOUGHERTY, PH.D. 102 Graduate College
Instructor in Chemistry

CHARLES PHELPS SMYTH, PH.D. 22 Morven St.
Instructor in Chemistry

JEAN FROIS-WITTMAN 124 Graduate College
Instructor in Modern Languages

EDWARD AYRES TAYLOR, A.M. 1 B Graduate College
Instructor in English

ROBERT MONTGOMERY STEPHENSON, A.M. 33 Graduate College
Instructor in History and Politics

ARTHUR FLETCHER LUCAS, A.B. P. O. Box 311
Instructor in Economics and Social Institutions

S. MCCLELLAN BUTT, A.M. 9 Aiken Ave.
Instructor in Philosophy

JOHN BARKER STEARNS, A.M. 6 B Graduate College
Instructor in Classics

MICHAEL JACOB ZIGLER, PH.D. 9 Aiken Ave.
Instructor in Psychology

WILLIAM KYLE SMITH, B.S. 302 Hodge Hall, Seminary
Instructor in Spanish

CYRUS COLTON MACDUFFEE, PH.D. 26 Murray Pl.
Instructor in Mathematics

PHILIP FRANKLIN, PH.D. 24 Dickinson St.
Instructor in Mathematics

PHILIP KISSAM, C.E. Graduate College
Instructor in Civil Engineering

WILLIAM LEE SANDIDGE, JR., M.S. 126 Graduate College
Instructor in English

CHARLES PADDOCK JOHNSON, A.M. 36 University Place
Instructor in Economics and Social Institutions

HUGH M. FLETCHER, A.M. 47 Spring St.
Instructor in Economics and Social Institutions

LAWRENCE FRANCIS HAWKINS LOWE, A.M. 43 Graduate College
Instructor in French

HARRY BRETZ, A.M. Graduate College
Instructor in Spanish

KENNETH BONNER, LL.B. 93 Alexander St.
Instructor in History and Politics

CHARLES WALTER GRAY, A.B. 2 B Graduate College
Instructor in Chemistry

ALBERT MATHIAS FRIEND, JR., A.M. 114 Graduate College
Instructor in Art and Archaeology

DONALD LEROY STONE, A.M. Nassau Club
Instructor in History and Politics

JOSEPH EPES BROWN, JR., A.M. 30 Battle Road
Instructor in English

GYFFORD DAVIDSON COLLINS, A.M. 47 Spring St.
Instructor in Physics

ROY JAMES KENNEDY, A.B. Graduate College
Instructor in Physics

DONALD MACLEAN PURDY, A.B. 24 Dickinson St.
Instructor in Physics

CHARLES THOMAS ZAHN, B.E. 44 Graduate College
Instructor in Physics

SEYMOUR E. HARRIS, A.B. 6 A Graduate College
Instructor in Economics and Social Institutions

AUGUST JOHN MUNDT, E.E. 59 Wiggins St.
Instructor in Physics

LINN R. BLANCHARD, B.A. 51 Patton Ave.
Head Cataloguer, University Library

LAWRENCE HEYL Lawrenceville, N. J.
Head Acquisitions Department, University Library

GEORGE M. PECK, A.B. 56 Patton Ave.
Curator of Special Collections, University Library

M. GEORGE SCHECK, A.B. 11 B Graduate College
Instructor in Psychology

WILLIAM WHIPPLE BENNETT, A.B. 22 Graduate College
Instructor in Economics

JAMES DOUGLAS BROWN, A.M. 220 Westfield Ave., Elizabeth, N. J.
Instructor in Economics

ASSISTANTS IN INSTRUCTION

LIONEL VALDEMAR SILVESTER, A.B. Mt. Lucas
Assistant in Biology

WALTER HERMAN BEISLER, M.S. 23 Bank St.
Assistant in Chemistry

CHARLES LEO MACY General Delivery
Assistant in Genetics

FRANK MARSHALL CLARK, M.S. 21 Bank St.
Assistant in Chemistry

ROBERT FRANKLIN MEHL, B.S. 2 B Graduate College
Research Assistant in Chemistry

FRANK J. SULLIVAN 68 Wiggins St.
Assistant in Physical Education

HENRY COBURN HOWARD, B.S. 24 Graduate College
Assistant in Chemistry

CLAUDE GORTATOWSKY, B.S. 11 C Graduate College
Assistant in Chemistry

ADOLPHUS JONES MCDAVID, B.S. 52 Graduate College
Assistant in Chemistry

THOMAS JEFFERSON WEBB, B.S. 52 Graduate College
Assistant in Chemistry

HERBERT FRANKLIN WHALEN, A.M. 4 B Graduate College
Assistant in Chemistry

JOHN SHERMAN BEEKLEY, A.M. — 24 Dickinson St.
Assistant in Physical Chemistry

JULIAN LOUIS MAYNARD — 24 Dickinson St.
Assistant in Chemistry

DONALD HOWARD POWERS, A.B. — 4 B Graduate College
Assistant in Chemistry

DWIGHT LEONARD DURLING, A.B. — Graduate College
Reader in English

THEODORE RONDTHALER, A.B. — Graduate College
Reader in English

HAROLD ROLLIN WANLESS, A.M. — 104 Graduate College
Reader in Geology

MACKINLEY HELM — 156 Graduate College
Reader in English

PART II

ADMISSION TO PRINCETON UNIVERSITY

ADMISSION TO PRINCETON UNIVERSITY

PRINCETON University offers: (1) *Undergraduate* courses in arts and sciences; (2) *Graduate* courses in arts and sciences; (3) *Technical* courses; and (4) maintains a Field Artillery Unit of the Reserve Officers Training Corps.

1. The plan of *Undergraduate* liberal studies provides two distinct courses, leading to bachelor degrees in four or three years:

First, the Bachelor of Arts course leading to the degree of A.B., and

Second, the Bachelor of Science course, leading to the degree of B.S., and planned to be mainly scientific in trend.

2. The *Graduate* School offers advanced and research work in arts and sciences, leading to the degrees of Master of Arts (A.M.), Master of Fine Arts (M.F.A.), and Doctor of Philosophy (Ph.D.).

The School of Architecture offers a two-year graduate course leading to the degree of Master of Fine Arts in Architecture.

3. The *Technical* courses offered are: four-year undergraduate courses in Engineering leading to the degree of Bachelor of Science in Engineering and, ordinarily after one year of graduate study, to the degrees of Civil Engineer (C.E.), Chemical Engineer (Chem.E.), Electrical Engineer (E.E.), Mechanical Engineering (M.E.), and Mining Engineer (E.M.); and a two-year graduate course in the School of Electrical Engineering leading to the degree of Electrical Engineer (E.E.).

4. The *Field Artillery* course extends through four academic years and two or three summer camps. It forms one of a student's elective subjects. Upon its satisfactory completion, provided he also is awarded his degree by the University, the candidate receives from the President of the United States a commission as Second Lieutenant of the Field Artillery Section of the Officers Reserve Corps.

A. ENTRANCE EXAMINATIONS

I. General Instructions

1. Candidates for admission to the freshman class of Princeton University must take the examinations of the College Entrance Examination Board in June or the examinations held in Princeton in September in the subjects required for admission. These examinations are held in June at various places throughout the country, and in September at Princeton only.

A list of centers at which the June examinations will be held is published about March 1, and may be obtained from the *Secretary of the College Entrance Examination Board, 431 West 117th Street, New York, N. Y.* A preliminary and partial list will be found on page 28.

Requests for examinations in June at places not listed should be made to the Secretary of the Board not later than February 1.

For regulations governing admission to the September examinations, see page 29.

2. Applications for the June examinations should be sent to the *Secretary of the College Entrance Examination Board.*

3. School recommendations and testimonials of character are required of all candidates for admission and must be sent to the *Registrar of Princeton University, Princeton, N. J.*

4. For regulations governing registration and examination fees, see page 24. In addition to the examination fee, a matriculation fee of five dollars is required of each candidate on admission to the University.

5. For regulations governing admission from other colleges, or to special and partial courses, see pages 37-38.

6. All candidates are expected to appear promptly at the time set for an examination. No candidate will be allowed to enter an examination later than a quarter of an hour after the scheduled time; and no candidate who has seen a question paper will be allowed to leave the examination until half an hour shall have elapsed.

Applicants who have any conditions or other deficiencies from the June examinations are required to remove them at the September entrance examinations.

Examinations at other than the specified times are granted

only in very exceptional circumstances. An applicant for examination at a special time must present a satisfactory reason and obtain permission by writing to the Registrar and must pay a fee of $10 for each subject, or part thereof, in which an examination is set. No special examinations are held outside of Princeton.

II. Plans of Admission

There are two plans of admission to Princeton University, the Old Plan and the New Plan.

OLD PLAN

Under the Old Plan, a candidate must pass written examinations in all subjects required for admission as listed on pages 31-35; he may, however, on recommendation of the Committee on Entrance, be admitted with conditions. A candidate for admission under the Old Plan may take the so-called *Ordinary Examinations* of the College Entrance Examination Board, or the *Comprehensive Examinations* of the College Entrance Examination Board, or any suitable combination of them.

A testimonial of character and a recommendation from the school, designating the individual subjects which the candidate is to offer with the school's approval, must be forwarded to the Registrar of Princeton University at least one week before the first day of the examinations.

Preliminary Examinations. Under the Old Plan a candidate may take examinations a year or more in advance of intended entrance to college and retain credit for subjects passed, provided he has been recommended for these examinations by his school. No credit for preliminary examinations will be given without the school recommendation.

NEW PLAN

Under the New Plan a candidate must send to the Registrar of Princeton University, besides a testimonial of character, the detailed statement described in the next paragraph. It must be signed by the principal of his school; it may be submitted on a blank furnished by the Registrar upon request or in some form convenient to the school; and it should be in the

Registrar's hands early enough to allow the candidate to file his application with the Secretary of the College Entrance Examination Board in accordance with the regulations printed on page 24.

School Record

The statement should contain the following information regarding the candidate's school record:

(a) The textbooks used in each year of his work in each subject;

(b) The number of weeks devoted each year to each subject;

(c) The number of hours per week devoted each year to each subject;

(d) The grade attained each year in each subject, together with an explanation of the system of marking.

Examinations

If the Committee on Entrance of Princeton University is satisfied from this statement that the candidate has completed a course of study fitting him for admission to the University and has attained satisfactory proficiency in his studies, permission to apply for examination under the New Plan will be granted and the candidate will be admitted without conditions upon passing *comprehensive examinations* in four specified subjects. These four subjects are generally those listed as required (not elective), under the requirements for admission to the various courses (see pages 31-35). These four examinations must be taken during one set of examinations and cannot be distributed over more than one set.

A student who fails in one of the four examinations in June, will have an opportunity to take the examination in that subject alone in September. If, however, he fails in two or more of the June examinations, he must repeat the examinations in all four subjects in September.

By a *Comprehensive Examination* is meant:

1. One that is adapted to such variety of school instruction as exists in the several subjects—that is, the question papers will not prescribe methods but will recognize the general prin-

ciple that the schools determine how they shall teach a subject and that the college tests results or power.

2. One that is adapted to the different stages of training in the subjects in which the papers are set—that is, they will give boys opportunities to show their power, whether they have had the minimum or the maximum amount of training given in school. For example, the papers in Latin will be so framed as to enable a candidate who has had only two years of Latin to show that he has as much command over the language as can be expected from that amount of training, and they will be similarly useful for the candidate who has had three or four years of Latin.

III. Aural Tests in Modern Languages

All candidates offering German, French or Spanish for admission will, in addition to the June or September written examinations, take the aural test given in September, as follows:

1. An aural test in Elementary German, French, or Spanish, designated German (x), French (x), and Spanish (x).

2. An aural test in Intermediate German, French, or Spanish, designated German (y), French (y), and Spanish (y).

A candidate's grade on these aural tests will be reckoned as an integral part of his final grade in the subject. Candidates who pass the written part of the examination but fail to pass the aural part will not be re-examined in the former. Candidates who fail in the written part of the examination, and pass only the aural part, must be re-examined in both parts.

Note: *Provisional credit only is granted for any Modern Language in case of candidates who have not passed the aural test. If the aural test is not passed by the beginning of a student's second year at Princeton the entrance credit for that Modern Language will lapse.*

Description of Aural Tests

The aural tests are supplementary to the written entrance examinations in the Modern Languages. They do not contemplate an increase in the length of time or the amount of work devoted in school to preparation for the present entrance requirements in German, French, and Spanish, but are given

with the view of encouraging secondary schools to lay greater emphasis on pronunciation, and ultimately of requiring an oral test in the Modern Languages for admission.

1. The aural test (x) in the Elementary requirement will be not more than forty-five minutes in length and will consist of three parts: (1) an exercise in writing easy German, French, or Spanish prose from dictation; (2) the reproduction in English of the content of a short "sight" passage in easy German, French, or Spanish prose, read aloud by the examiner; (3) writing in German, French, or Spanish answers to questions put by the examiner in that language on a short connected passage, read aloud by the examiner just before the questions are asked.

2. The aural test (y) in the Intermediate requirement will likewise be not more than forty-five minutes in length and will consist of three parts: (1) an exercise in writing moderately difficult German, French, or Spanish from dictation; (2) the written reproduction in German, French, or Spanish of the content of a short "sight" passage of ordinary narrative German, French, or Spanish read aloud by the examiner; (3) writing in the respective language answers to questions put by the examiner in German, French or Spanish on a connected prose passage, read aloud by the examiner just before the questions are asked.

IV. June Examinations

Application and Fee

All applications for examination must be addressed to the *Secretary of the College Entrance Board, 431 West 117th Street, New York, N. Y.,* and must be made upon a blank form to be obtained by applying to the Secretary of the Board.

Candidates who wish to take the Board's comprehensive examinations under the New Plan must make application on a special blank form to be obtained from the Secretary of the Board. No application to take these comprehensive examinations can be entertained by the Board unless the candidate has previously obtained permission from the Committee on Entrance of Princeton University. In this permission the particular examinations to be taken by the candidate must be specified. As the application to the Board must reach the Secretary on or before a specified date (see below), it will be

necessary for the candidate to obtain this permission from the Committee on Entrance of Princeton University at a still earlier date.

Separate blank forms are provided for the "application for examination" and "certificate of recommendation." The former should be addressed to the *College Entrance Examination Board, 431 West 117th Street, New York, N. Y.*, the latter to the *Registrar, Princeton University, Princeton, N. J.* Both forms may be obtained from the Secretary of the College Entrance Examination Board upon request by mail.

Provided that the application reach the College Entrance Examination Board not later than the date specified below, the examination fee will be $9.00 if the candidate is to be examined in the United States or Canada, $20.00 if the candidate is to be examined outside of the United States or Canada. The fee should be transmitted by postal order, express order, or draft on New York, should accompany the application, and should be payable to the College Entrance Examination Board.

Applications and fees of candidates who wish to be examined outside of the United States or Canada must reach the Secretary of the Board at least six weeks in advance of the examinations, that is, on or before May 8, 1922.

Applications and fees of candidates who wish to be examined at points in the United States west of the Mississippi River or in Canada must be received at least four weeks in advance of the examinations, that is, on or before May 22, 1922.

Applications and fees of candidates who wish to be examined at points in the United States east of or on the Mississippi River must be received at least three weeks in advance of the examinations, that is, on or before May 29, 1922.

When the candidate has failed to obtain the required blank form of application for examination, the usual examination fee will be accepted if the fee arrive not later than the specified date accompanied by a memorandum containing the name and address of the candidate, the examination center at which he wishes to present himself, and a list of all the subjects in which he may have occasion to take the Board's examinations.

Applications received later than the dates named will be accepted when it is possible to arrange for the admission of

the candidates concerned, but only upon payment of $9.00 in addition to the usual fee.

A list of the places at which the examinations are to be held by the Board in June, 1922, will be published about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be transmitted to the Secretary of the Board not later than February 1.

Schedule of June Examinations, 1922

In June 1922 the schedule of the examinations will be as follows:

Monday, June 19	
8.45-9.30 a. m.	Period for Registration.
9.30 a. m.-12.30 p. m.	Mathematics *A*, Elementary Algebra complete (three hours)
	Mathematics *A1*, Algebra to Quadratics (two hours)
	Mathematics *A2*, Quadratics and Beyond (two hours)
	Comprehensive Mathematics (three hours)
1.45-2 p. m.	Period for Registration.
2-6 p. m.	French *A*, Elementary—First and Second Years (two hours)
	French *B*, Intermediate—Third Year (two hours)
	Comprehensive French (three hours)
Tuesday, June 20	
8.45-9 a. m.	Period for Registration
9 a. m.-1 p. m.	English *A*, Grammar, Composition, and reading (two hours)
	English *B*, Grammar, Composition, and Study (two hours)
	Comprehensive English (three hours)
1.45-2 p. m.	Period for Registration
2-6 p. m.	Latin *3*, Second Year Latin (two hours)
	Latin *5*, Virgil and Sight Translation of Poetry (two hours)
Wednesday, June 21	
8.45-9 a. m.	Period for Registration
9 a. m.-1 p. m.	Latin *2*, Elementary Prose Composition (one hour)
	Latin *4*, Cicero and Sight Translation of Prose (two hours)
	Latin *124*, Latin 1, 2 and 4 combined (three hours)
	Comprehensive Latin (three hours)

1.45-2 p. m.	Period for Registration
2-6 p. m.	Mathematics *B*, Advanced Algebra (two hours)
	Mathematics *E*, Plane and Spherical Trigonometry (two hours)
	Mathematics *F*, Plane Trigonometry (two (hours)
Thursday, June 22	
8.45-9 a. m.	Period of Registration
9 a. m.-1 p. m.	History *A*, Ancient (two hours)
	History *B*, Mediaeval and Modern (two hours)
	History *C*, Modern (two hours)
	History *D*, English (two hours)
	History *E*, American (two hours)
	History *F*, Civil Government (two hours)
	History *G*, American and Civil Government (two hours)
	COMPREHENSIVE HISTORY (three hours)
1.45-2 p. m.	Period for Registration
2-6 p. m.	Mathematics *CD*, Plane and Solid Geometry combined (three hours)
	Mathematics *C*, Plane Geometry (two hours)
	Mathematics *D*, Solid Geometry (two hours)
Friday, June 23	
8.45-9 a. m.	Period for Registration
	Physics (two hours)
	Biology (two hours)
	COMPREHENSIVE PHYSICS (three hours)
1-2 p. m.	Period for Registration
2-6 p. m.	German *A*, Elementary—First and Second Years (two hours)
	German *B*, Intermediate—Third Year (two hours)
	Spanish, Elementary—First and Second Years (two hours)
	COMPREHENSIVE GERMAN (three hours)
	COMPREHENSIVE SPANISH (three hours)
Saturday, June 24	
8.45-9 a. m.	Period for Registration
	COMPREHENSIVE CHEMISTRY (three hours)
9 a. m.-1 p. m.	Greek *A1*, Grammar (one hour)
	Greek *A2*, Elementary Composition (one hour)
	Greek *BG*, Xenophon and Sight Translation (two hours)
1.45-2 p. m.	Period for Registration
2-5 p. m.	Greek *C*, Homer's Iliad (two hours)
	COMPREHENSIVE GREEK (three hours)

JUNE EXAMINATIONS—PRELIMINARY LIST OF CENTERS

The following is a list of the more important places at which the Board will hold examinations in June, 1921. A more nearly complete list will be published about March 1, 1922.

ALABAMA, Birmingham, Montgomery.
ARKANSAS, Little Rock.
CALIFORNIA, Berkeley, Los Angeles.
COLORADO, Denver.
CONNECTICUT, Bridgeport, Danbury, Derby, Greenwich, Hartford, Meriden, Middletown, New Haven, Norwich, Norwalk, Willimantic, Waterbury, Winsted.
DELAWARE, Wilmington.
DISTRICT OF COLUMBIA, Washington.
FLORIDA, JACKSONVILLE.
GEORGIA, Atlanta, Savannah.
IDAHO, BOISE.
ILLINOIS, Chicago, Peoria, Evanston.
INDIANA, Indianapolis, Terre Haute.
IOWA, Davenport, Des Moines, Dubuque.
KENTUCKY, Louisville.
LOUISIANA, New Orleans.
MAINE, Bangor, Portland.
MARYLAND, Baltimore.
MASSACHUSETTS, Amherst, Beverly, Boston, Cambridge, Fall River, Fitchburg, Gloucester, Great Barrington, Haverhill, Lowell, Lynn, New Bedford, Newburyport, Northampton, South Hadley, Springfield, Taunton, Tufts College, Wellesley, Williamstown, Worcester.
MICHIGAN, Detroit, Grand Rapids.
MINNESOTA, Minneapolis.
MISSOURI, Kansas City, St. Louis.
MONTANA, Helena.
NEBRASKA, Omaha.
NEW HAMPSHIRE, Concord, Hanover, Manchester, Portsmouth.
NEW JERSEY, Asbury Park, East Orange, Montclair, Newark, New Brunswick, Passaic, Plainfield, Princeton, Summit, Trenton.
NEW YORK, Albany, Binghamton, Brooklyn, Buffalo, Elmira, Glens Falls, Gloversville, Ithaca, Kingston, New York, Ogdensburg, Peekskill, Poughkeepsie, Rochester, Syracuse, Utica.
NORTH CAROLINA, Asheville.
OHIO, Cincinnati, Cleveland, Columbus, Dayton, Toledo, Youngstown.
OREGON, Portland.

PENNSYLVANIA, Erie, Harrisburg, Lancaster, Philadelphia, Pittsburgh, Reading, Scranton, Wilkes-Barre, Williamsport.
RHODE ISLAND, Newport, Providence, Westerly.
SOUTH CAROLINA, Charleston.
TENNESSEE, Memphis, Nashville.
TEXAS, Austin, Dallas, Houston.
UTAH, Salt Lake City.
VERMONT, Bellows Falls, Burlington, Rutland.
VIRGINIA, Richmond, Roanoke.
WASHINGTON, Seattle.
WISCONSIN, Madison, Milwaukee.
HAWAII, Honolulu.
CANADA, Montreal, Toronto.
ENGLAND, London.
FRANCE, Paris.

V. SEPTEMBER EXAMINATIONS AT PRINCETON, 1922

A candidate who proposes to take the entrance examinations at Princeton in September should apply to the Registrar of Princeton University on or before September 1.

At the September examinations only comprehensive question papers, prepared by the College Entrance Examination Board, will be used. These papers are adapted to both Old and New Plan candidates.

A fee of five dollars, payable to Princeton University preferably either by money order or check, is required for the September examinations. A receipt will be sent to the candidate, which he may be required to show to the examiner on registering for the examinations. A candidate who has not met these regulations for application and payment of fee may be admitted to the examinations, but the results of the examinations may be delayed. No report will be sent until the candidate's application and fee shall have been received.

SCHEDULE OF SEPTEMBER EXAMINATIONS, 1922

In September 1922 the order of examinations will be as follows:

Monday, September 18

8.30-9 a. m.	Period for Registration
9 a. m.-12 m.	English
2-5 p. m.	French

Tuesday, September 19

9 a. m.-12 m.	Latin
2-5 p. m.	History

Wednesday, September 20

9 a. m.-12 m.	Elementary Mathematics
2-5 p. m.	German
	Spanish

Thursday, September 21

9 a. m.-12 m.	Physics
	Chemistry
2-5 p. m.	Greek
	Advanced Mathematics

Tuesday, September 26

Aural Tests in Modern Languages

All candidates offering French, German or Spanish for admission are required, in addition to the written examination taken either in June or September, to take these aural tests. Candidates will be divided into alphabetical groups and will meet in the rooms of McCosh Hall as follows:

9.00 A. M.- 9.45 A. M. French A Elementary
A through D ..... McCosh 60
E " K ..... " 62
L " R ..... " 64
S " Z ..... " 66

10.00 A. M.-10.45 A. M. French B Intermediate
A through D ..... McCosh 60
E " K ..... " 62
L " R ..... " 64
S " Z ..... " 66

11.00 A. M.-11.45 A. M. German A Elementary
A through D ..... McCosh 60
E " K ..... " 62
L " R ..... " 64
S " Z ..... " 66

12.00 M.-12.45 P. M. German B Intermediate
A through D ..... McCosh 60
E " K ..... " 62
L " R ..... " 64
S " Z ..... " 66

2.00 P. M.- 2.45 P. M. Spanish A Elementary
A through Z ..... McCosh 60

2.00 P. M.- 2.45 P. M. Spanish B Intermediate
A through Z ..... McCosh 66

B. FRESHMAN ENTRANCE REQUIREMENTS

The following pages state the entrance requirements for admission to the undergraduate courses offered at Princeton University.

While provision is made whereby a substitute for Greek may be offered for admission to the course leading to the degree of Bachelor of Arts, and a substitute for Latin may be offered for admission to the course leading to the degree of Bachelor of Science, students preparing for admission to the Bachelor of Arts course are strongly advised to take both Greek and Latin, and those preparing for admission to the Bachelor of Science course are strongly advised to take Latin, as constituting with Mathematics the best foundation for a liberal education in college studies.

A complete list of all entrance subjects, required and elective, will be found on page *35*.

NOTE.—*These subjects, with suggestions as to preparation in them, are described in detail in a special circular of information issued by the College Entrance Examination Board and listed as Document No. 93.* Upon request to the College Entrance Examination Board a single copy of this document will be sent to any teacher, without charge. In general, a charge of ten cents (which may be remitted in postage stamps) will be made.

All requests for this document should be addressed to the College Entrance Examination Board, 431 W. 117th St., New York, N. Y.

BACHELOR OF ARTS

1. A candidate for admission to the course leading to the degree of Bachelor of Arts (A.B.), under the ordinary or *"Old Plan"* of admission is examined in:

English 3 Units
English A and B, *or* English comprehensive, *English Cp.*
Latin, 4 Units
Latin 2, 3, 4, 5, *or*
Latin 124, 5, *or*
Latin comprehensive, four years, *Latin Cp. 4*
Mathematics, 3 Units
Algebra A1 and A2, and Plane Geometry C *or*
Elementary Mathematics comprehensive, three years, *Mathematics Cp. 3*
Greek or
Intermediate Modern Language, 3 Units

Greek A1, A2, BG, C, *or* Greek comprehensive, three years, *Greek Cp. 3*
French B Intermediate, *or* French comprehensive, three years, *French Cp. 3*
German B Intermediate, *or* German comprehensive, three years, *French Cp. 3*
Spanish comprehensive, three years, *Spanish Cp. 3*

and in subjects amounting to two (2) additional units from the following list of elective subjects:

	UNITS		UNITS
History (Ancient)	1	†Elementary Spanish	2
History (Med. and Mod.)	1	Intermediate Spanish	3
History (English)	1	Advanced Mathematics D	
History (American)	1	(Solid Geometry)	½
*History (Mod. Eur.)	1	Advanced Mathematics F	
†Elementary French	2	(Plane Trigonometry)	½
Intermediate French	3	Physics	1
†Elementary German	2	Chemistry	1
Intermediate German	3	Biology	1

2. A candidate for admission to the course leading to the degree of Bachelor of Arts (A.B.), under the *"New Plan"* of admission, by means of comprehensive examinations, is examined in:

English, 3 Units
Latin, 4 Units
Mathematics, 3 Units
Greek or Intermediate Modern Language, 3 Units

and must present a satisfactory school certificate covering two (2) additional units from the list of elective subjects given in section 1.

BACHELOR OF SCIENCE

1. A candidate for admission to the course leading to the degree of Bachelor of Science (B.S.), under the ordinary or *"Old Plan"* of admission is examined in:

English, 3 Units
English A and B, *or* English comprehensive, *English Cp.*
Mathematics, Elementary and Advanced, 4 Units
Algebra A1 and A2, Plane Geometry C, Solid Geometry D, Plane Trigonometry F, *or*
Advanced Mathematics comprehensive, four years, *Mathematics Cp. 4*

* No credit for Modern European History will be granted to candidates credited with either Mediaeval and Modern European History or English History.

† A language offered for 3 (or 4) units may not also be offered for 2 units.

{ *Latin, 4 Units, or*
{ *Intermediate Modern Language, 3 Units*
Latin 2, 3, 4, 5, *or*
Latin, 124, 5, *or*
Latin comprehensive, four years, *Latin Cp. 4*
French B Intermediate, *or* French comprehensive, three years, *French Cp. 3, or*
German B. Intermediate, *or* German comprehensive, three years, *German Cp. 3, or*
Spanish comprehensive, three years, *Spanish Cp. 3*
Science, 1 Unit
Physics, *or*
Chemistry, *or*
Biology
Elementary Foreign Language, 2 (3) Units
French A Elementary, *or* French comprehensive, two years, *French Cp. 2, or*
German A Elementary, *or* German comprehensive, two years, *German Cp. 2, or*
Spanish A Elementary, *or* Spanish comprehensive, two years, *Spanish Cp. 2, or*
Latin 3, *or* Latin comprehensive, two years, *Latin Cp. 2, or*
Latin 124, *or* Latin comprehensive, three years, *Latin Cp. 3.* (*3 Units*).

and in enough additional subjects from the list of elective subjects given in section 1 of the Bachelor of Arts requirements to total 15 units (see page 32).

A candidate who offers only two or three years of work in Latin, must offer an Intermediate (three years) Modern Language.

2. A candidate for admission to the course leading to the degree of Bachelor of Science (B.S.), under the *"New Plan"* of admission, by means of comprehensive examinations, is examined in:

English, 3 Units
Mathematics Elementary and Advanced, 4 Units
Latin (four years), *4 Units*, or
Intermediate Modern Language, 3 Units
and one of
**Latin* (two years), *2 Units*
**Elementary Modern Language, 2 Units*
Physics, 1 Unit
Chemistry, 1 Unit
Biology, 1 Unit

---

* A language offered for 3 (or 4) Units may not also be offered for 2 Units

Such a candidate must also present satisfactory school certificates covering:

Latin (2 years), *or*
Elementary Modern Language, 2 Units
(if neither is offered for examination)
Physics, 1 Unit, or
Chemistry, 1 Unit, or
Biology, 1 Unit
(if none is offered for examination)

and enough additional subjects from the list of elective subjects given in section 1 of the Bachelor of Arts requirements to total 15 units (see page 32).

Bachelor of Science in Engineering

1. A candidate for admission to the courses leading to the degree of Bachelor of Science in Engineering, under the ordinary or *"Old Plan"* of admission, is examined in:

Two Elementary Foreign Languages, 4 Units
Latin 3, *or* Latin comprehensive, two years, *Latin Cp. 2*
French A, *or* French comprehensive, two years, *French Cp. 2*
German A, *or* German comprehensive, two years, *German Cp. 2*
Spanish A, *or* Spanish comprehensive, two years, *Spanish Cp. 2*
English, 3 Units
English A, B, *or* English comprehensive, *English Cp.*
Mathematics, 4 Units
Mathematics A (including A1, and A2), C, D, F, *or*
Advanced Mathematics comprehensive, four years, *Mathematics Cp. 4*
Physics or
Chemistry 1 Unit

and in enough additional subjects from the list of elective subjects given in section 1 of the Bachelor of Arts requirements to total 15 units (see page 32).

2. A candidate for admission to the courses leading to the degree of Bachelor of Science in Engineering, under the *"New Plan"* of admission, by means of comprehensive examinations, is examined in:

English, 3 Units
Mathematics, 4 Units
An Elementary Foreign Language, 2 Units
Physics or Chemistry, or History, 1 Unit

and must present satisfactory school certificates covering

enough additional units from the list of elective subjects given in section 1 of the Bachelor of Arts requirements to total 15 units (see page 32).

List of All Entrance Subjects

Ordinary Examinations	Comprehensive Examinations
Greek, 3 units	**Greek**
A1. Greek Grammar	
A2. Elementary Prose Composition	
BG. Xenophon and Sight Translation and Prose	Cp. 2. Two-year Greek (2)
C. Homer, Iliad Bks. I-III	Cp. 3. Three-year Greek (3)
Latin, 4 units	**Latin**
3. Second Year Latin	Cp. 2. Two-year Latin (2)
2. Elementary Prose Composition. 4. Cicero and Sight Translation of Prose	
124. Latin Grammar, Composition and Cicero	Cp. 3. Three-year Latin (3)
5. Virgil and Sight Translation of Poetry	Cp. 4. Four-year Latin (4)
English, 3 units	**English**
A. Grammar and Composition	
B. Literature	Cp. English (3)
Mathematics, 4 units	**Mathematics**
A1. Algebra to Quadratics (1)	
A2. Algebra, Quadratics and beyond (1)	
C. Plane Geometry (1)	Cp. 3. Elementary Mathematics (3)
D. Solid Geometry (½)	Cp. 4. Elementary and Advanced Mathematics* (4)
F. Plane Trigonometry (½)	
French, 3 units	**French**
A. Elementary (2)	Cp. 2. Two-year French (2)
B. Intermediate (3)	Cp. 3. Three-year French (3)
German, 3 units	**German**
A. Elementary (2)	Cp. 2. Two-year German (2)
B. Intermediate (3)	Cp. 3. Three-year German (3)
Spanish, 3 units	**Spanish**
A. Elementary (2)	Cp. 2. Two-year Spanish (2)
B. Intermediate (3)	Cp. 3. Three-year Spanish (3)

* This examination is so arranged that the candidate may offer in addition to Elementary Algebra and Plane Geometry either one or both of Solid Geometry and Plane Geometry.

TABLE OF VALUES IN UNITS*

	Requirements for admission to the course leading to the degree of Bachelor of Arts	Units	Requirements for admission to the course leading to the degree of Bachelor of Science	Units	Requirements for admission to the course leading to the degree of Bachelor of Science in Engineering	Units
	Greek A1, A2, BG, C, or *Greek Cp. 3*, or	3	Latin 2, 3, 4, 5, or 124, 5, or		Two Elementary Foreign Languages	4
	An Intermediate Modern Language		*Latin Cp. 4*, or	4	Latin 3, or *Latin Cp. 2*	
			An Intermediate Modern Language	3	French A, or *French Cp. 2*	
REQUIRED	Latin 2, 3, 4, 5, or 124, 5, or	4	English A, B, or *English Cp.*	3	German A, or *German Cp. 2*	
	Latin Cp. 4		Mathematics A1, A2, C, D, F, or		Spanish A, or *Spanish Cp. 2*	
SUBJECTS			*Advanced Mathematics Cp. 4*	4	Mathematics A1, A2, C, D, F, or	4
	English A, B, or *English Cp.*	3	An Elementary Foreign Language	2	*Advanced Mathematics, Cp. 4*	
			Physics or Chemistry or Biology	1		
	Mathematics A1, A2, C, or *Elementary Mathematics Cp. 3*	3			Physics or Chemistry	1
					English A, B, or *English Cp.*	3
	Greek A1, A2, BG, C or *Greek Cp. 3*	3	History A, or *Ancient Cp.*	1	History A, or *Ancient Cp.*	1
ELECTIVE	History A, or *Ancient Cp.*	1	History B, or *Med. and Mod. Cp.*	1	History B, or *Med. and Cp.*	1
	History B, or *Med. and Mod. Cp.*	1	History C, or *English Cp.*	1	History C, or *English Cp.*	1
SUBJECTS	History C, or *English Cp.*	1	History D, or *American Cp.*	1	History D, or *American Cp.*	1
	History D, or *American Cp.*	1	History E, or *Mod. Europ. Cp.*	1	History E, or *Mod. Europ. Cp.*	1
	History E, or *Mod. Europ. Cp.*	1	French A, or *French Cp. 2*	2	French A, or *French Cp. 2*	2
Enough additional Units to make a total of 15.	French A, or *French Cp. 2*	2	French B, or *French Cp. 3*	3	French B, or *French Cp. 3*	3
	French B, or *French Cp. 3*	3	German A, or *German Cp. 2*	2	German A, or *German Cp. 2*	2
	German A, or *German Cp. 2*	2	German B, or *German Cp. 3*	3	German B, or *German Cp. 3*	3
	German B, or *German Cp. 3*	3	Spanish A, or *Spanish Cp. 2*	2	Spanish A, or *Spanish Cp. 2*	2
	Spanish A, or *Spanish Cp. 2*	2	*Spanish Cp. 3*	3	*Spanish Cp. 3*	3
	Spanish Cp. 3	3	Latin 3, or *Latin Cp. 2*	2		
	Mathematics D, or *Mathematics Cp. 4*	½	Latin 124, or *Latin Cp. 3*	3	Latin 3, or *Latin Cp. 2*	2
	Mathematics F, or *Mathematics Cp. 4*	½	*Latin Cp. 4*	4	Latin 124, or *Latin Cp. 3*	3
	Physics	1	Physics	1	*Latin Cp. 4*	4
	Chemistry	1	Chemistry	1	Physics	1
	Biology	1	Biology	1	Chemistry	1

* A unit represents a year's work in a subject at a specified number of hours a week.

HISTORY, 2 UNITS: (Not more than two of)	HISTORY: (Not more than two of)
A. Ancient (1)	Ancient (1)
B. Mediaeval and Modern (1)	Mediaeval and Modern (1)
C. English (1)	English (1)
D. American (1)	American (1)
E. Modern European* (1)	Modern European* (1)
SCIENCE, 1 UNIT EACH	SCIENCE
Physics (1)	Physics (1)
Chemistry (1)	Chemistry (1)
Biology (1)	Biology (1)

C. ASIATIC STUDENTS

Any candidate for admission who is a native of Asia, and not of American or European parentage, may offer, as a substitute for the regular requirement in Latin an equivalent in Arabic, Chinese, Sanskrit, or Pali. A candidate who wishes to make this substitution should notify the Registrar not later than March 1 of the year in which he plans to enter.

D. ADMISSION TO SPECIAL COURSES

In exceptional cases students are admitted to the privileges of the University, not as members of any one of the four regular classes or as candidates for a degree, but are allowed to take special undergraduate courses, selected under the direction of the Faculty, in such a manner as to secure as full an employment of their time as in the regular course. Such students are listed as "Special Students not Candidates for a Degree," and are subject to the same regulations and discipline and to the same examinations in the studies pursued as other undergraduates.

A candidate for admission as a special student must present satisfactory testimonials of character, and will be expected to take the regular entrance examinations upon the subjects prerequisite to his courses and to pass a sufficient number to show that he has an amount of preparation equivalent to that required of regular students.

These special courses are not offered to those who attempt to enter the regular courses and fail to do so, nor to those who have failed in the regular courses.

---

* No credit for Modern European History will be granted to candidates who are credited with either Mediaevel and Modern European History or English History.

When special students are finally leaving the University, certificates of proficiency, signed by the President and Registrar, may be granted them on report by the Committee on Examinations and Standing that they have completed the courses on their schedule.

E. STUDENTS PURSUING PARTIAL COURSES

Students in the Princeton Theological Seminary, or other properly qualified persons, may be admitted to one or more undergraduate courses in the University. Such students shall be entered as undergraduates in the catalogue under the caption, Students Pursuing Partial Courses. Students in the Princeton Theological Seminary are admitted to these courses without charge; but other persons are charged at the rate of $20.00 a course.

F. ADMISSION FROM OTHER COLLEGES

A candidate for admission from another college must present a letter of honorable dismissal from the president or dean of that college.

A candidate for admission from a college to which he was admitted by certificate will be held for the Princeton freshman entrance requirements in each required entrance subject in the continuation of which his standing in his former college was not in the upper half of his class. Such of these requirements as are not satisfied by examination at the time of admission must be satisfied in accordance with the rules which apply to students regularly admitted upon examination.

The candidate's credits for courses taken in the college from which he comes will be accepted in so far as these courses are equivalent to courses given at Princeton. If his credits show that he has an amount of preparation equivalent to that required of a regular freshman, he will be admitted and will be classified as a "Student Qualifying for Regular Standing." He will be assigned to those courses for which he is qualified, preference being given to such of the required courses as he may not have had. If at the end of two terms of residence in Princeton his work has been satisfactory, he may be enrolled as a regular student, his status being determined by his credits; or, in case he qualifies for it, he may receive a degree with

the graduating class. In the meantime he will be subject to the same regulations and discipline as a regular student.

No person is admitted to the University as a candidate for a Bachelor's degree, or for the degree of Bachelor of Science in Engineering, after the beginning of the first term of the senior year.

G. REGULATION CONCERNING SECRET SOCIETIES

Immediately after the beginning of the academic year students entering the Undergraduate Department meet for matriculation; and at that time subscription to the following pledge is required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without mental reservation, that we will have no active connection whatever with any secret society, nor be present at the meeting of any secret society in this institution so long as we are members of Princeton University, it being understood that this promise has no reference to the American Whig and Cliosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

PART III

PLAN OF UNDERGRADUATE STUDY

PLAN OF UNDERGRADUATE STUDY

THE regular undergraduate curriculum extends through four academic years. Students of exceptional ability, however, may be graduated in three years on fulfilling the requirements stated in a subsequent section.

The undergraduate courses of study lead to the degrees of Bachelor of Arts, Bachelor of Science, or Bachelor of Science in Engineering.

The degree of Bachelor of Arts, (A.B.) is conferred upon candidates who offer Latin for entrance, take freshman Latin, or Greek 105, 106, and complete a total of 18 units of preparatory and college work in subjects included in the Division of Philosophy, Literature, and Art, and who also meet the requirements of a Division or of a Department of their choice.

The degree of Bachelor of Science (B.S.) is conferred upon candidates who take, in addition to the Mathematics and Science prescribed in General Regulations No. 5, (see "Requirements for Bachelor's Degrees") sufficient courses in Mathematics and Science to make a total of 9 units, and who also meet the requirements of a Division or of a Department of their choice.

The degree of Bachelor of Science in Engineering is conferred upon candidates who complete any one of the five groups of courses in Engineering subjects, as outlined on subsequent pages under the School of Engineering.

The schedule of each candidate for a bachelor's degree normally consists of five courses of three hours a week.

The various courses offered are open only to students of the year to which the courses belong, except as students are permitted or required to take a course belonging to a preceding year.

Requirements for Bachelor's Degrees

The requirements for the bachelor's degrees are planned to give the student a broad general training, preserving as far as possible the type of the old American college course.

In determining the requirements for each degree the preparatory and college work done by the student is treated as a whole.

For convenience these requirements are enumerated in terms of units to be taken in the several subjects, the unit of preparatory work being a Carnegie Unit, and the unit of college work being a one-year course. The units are distributed as follows:

Preparatory work,	15 units
College work (4 years)	20 "
Total	35

I. General Regulations

1. Each candidate shall have training in English, two Foreign Languages, Mathematics and Science. The term Foreign Language includes any language other than English.

2. Each candidate shall take Physics or Chemistry in either freshman or sophomore year.

3. A freshman who is a candidate for the degree of A.B. shall take Latin 107-108 or Greek 105-106, and Hygiene and shall continue two of the following subjects offered for entrance: English, Foreign Language, Mathematics, Science. A freshman who is a candidate for the degree of B.S. shall take Mathematics 109-110, and Hygiene, and shall continue two of the following subjects offered for entrance: English, Foreign Language and Science. If conditioned in English, on entrance, a freshman shall take English in freshman year.

4. Each candidate shall take in sophomore year Philosophy 201, 202 and any subject or subjects necessary to complete the requirements defined in paragraph 5 below.

5. Each candidate shall have completed by the end of sophomore year

12	units of Language, including English,
6	" of Mathematics and Science (A.B. candidates may postpone one of these courses until junior year)
1	unit of Philosophy
19	units of the 25 units necessary to complete sophomore year

6. A candidate for the degree of Bachelor of Science shall take before his junior year at least one college course in two of the following subjects: Physics, Chemistry, Biology.

II. Course of Study

FRESHMAN YEAR

Required Studies

A.B.	*B.S.*
Latin, or Greek 105, 106; and the continuation of two of the following subjects offered for entrance: English, Foreign Language, Mathematics, Science.	Mathematics; and the continuation of two of the following subjects offered for entrance: English, Foreign Language, Science

In addition to the three courses required above a freshman shall choose two electives from the following list:

Latin	Historical Introduction to Politics and Economics
Greek or Beginning Greek	Mathematics
German	Physics
Spanish	Chemistry
French	Biology
English	Field Artillery

A course in Hygiene, two hours a week, first term, and a course in Physical Education, three periods a week, both terms, are also required of all freshmen, but the hours or periods of these courses are not to conflict with the hours regularly scheduled in the curriculum.

In determining his studies for freshman year, a student must proceed according to the General Regulations already specified.

SOPHOMORE YEAR

Required Studies

A.B.	*B.S.*
Philosophy	Philosophy

and any subject or subjects necessary to make up the minimum requirements in Language and Mathematics and Science (see General Regulations No. 5).

Elective Studies

A sophomore shall take five courses in all, choosing electives from the following list:

History
Economics
History of Architecture
Latin
Greek
French
German
Spanish or Italian
English
Mathematics
Physics
Chemistry
Geology
Biology
Graphics (if Mathematics is taken)
Field Artillery

JUNIOR AND SENIOR YEARS

1. The Departments of Instruction are grouped in three Divisions, as follows:

I. Philosophy, Literature, and Art:
(including Philosophy, Ancient and Modern Languages, English, Art and Archaeology).

NOTE: *No student may choose this Division unless he has completed Entrance and Freshman Latin.*

II. History, Politics and Economics:
(including History and Politics, Economics and Social Institutions).

III. Mathematics and Science:
(including Mathematics, Astronomy, Physics, Chemistry, Biology, Geology, Mineralogy, Psychology.)

2. Each junior and senior shall take five courses each year.

3. In his junior year a student shall take three courses in a Division, and in his senior year three courses in the same Division, two of which shall be continuations of courses in his junior year, in the sense that a course and its successor are in the same Department.

4. In each Department there is at least one course in junior year and one in senior year open to students of the Division and open for election by students outside of the Division qualified to take the course. The other courses in the Department may be restricted to students who have shown a capacity for doing superior work, the specifications for admission to the courses being determined by the Department.

5. If a student so desires, and is qualified to do so (see preceding paragraph), he may take two courses in junior year and two in senior year in the same Department instead of taking three courses each year in a Division.

JUNIOR YEAR

[NOTE: *The numbers prefixed to the courses in the following list refer to the description of those courses on later pages. All courses three hours a week. First Term courses have odd numbers; Second Term courses have even numbers.*]

I. DIVISION OF PHILOSOPHY, LITERATURE, AND ART

I. *Department of Philosophy*

Two courses throughout year required of Departmental students, one of which must be 301, 302. History of Philosophy.

301, 302. History of Philosophy
303. Principles of Psychology. 304. Advanced Logic
(*Advised elective:* History 305, 306, Constitutional Government, History 307, Constitutional Interpretation, History 308, Jurisprudence.)

II. *Department of Classics*

303. Greek Comedy
308. Latin Essays
310. Roman History
317. Latin Literature
319. Theocritus
322. St. Paul
324. Greek Tragic Dram
305. Roman Satire
309. Greek History
311. Greek Tragedy
318. Latin Literature
320. Plato
323. Greek Culture
325, 326. Elementary Greek

IIIa. *Department of Modern Languages. Germanic Section*

301, 302. German Literature (Opitz to Schiller)
303, 304. Goethe's Life and Works

IIIb. *Department of Modern Languages. Romanic Section*

301, 302. French Classical Literature
305. Italian. 306. Dante
307, 308. Spanish Literature

IV. *Department of English*

301. Shakespeare. 302. English Drama (History)
303. Elements of Poetry. 304. Elements of the English Language
305. Chaucer. 306. Spenser and Milton
307, 308. Advanced Public Speaking

V. *Department of Art and Archaeology*

301. Ancient Art. 302. Mediaeval Art
303, 304. Ancient and Mediaeval Architecture

305. Elements of Architecture
306. Shades, Shadows and Rendering
308. Architectural Drawing

II. Division of History and Politics, and Economics

VI. *Department of History and Politics*

301, 302. History of the United States
303, 304. Mediaeval History
305, 306. Constitutional Government
307. Constitutional Interpretation. 308. Jurisprudence
309. Greek History. 310. Roman History
(*Requisite cognate course:* Economics. 301, 302. Economics)
(*Advised elective:* Philosophy, 301, 302. History of Philosophy)

VII. *Department of Economics and Social Institutions*

301. Elements of Economics. 302. Economic Problems
303. Elements of Accounting. 304. Principles of Accounting
306. Statistics

III. Division of Mathematics and Science

VIII. *Department of Mathematics*

303, 304. Projective Geometry
307, 308. Analysis
309, 310. Analytical Mechanics
311, 312. Ballistics

IX. *Department of Physics*

301. 302. Experimental Physics
303. Properties of Matter. 304. Heat
309, 310. Analytical Mechanics

Honors Courses in Physics

309, 310. Analytical Mechanics
311, 312. Physical Optics
313, 314. Experimental Physics

X. *Department of Astronomy*

301. Introduction to Astronomy; 302. Stellar Astronomy
(Cognate course required of candidates for Honors in Astronomy)

XI. *Department of Chemistry*

General Physics required unless already taken.

For students who take four years of Chemistry

307. Quantitative Analysis II, and 308. Organic Chemistry I or
305. Physical Chemistry I

308. Quantitative Analysis III, and 304. Organic Chemistry II or
306. Physical Chemistry II

For students who take three years of Chemistry

301. Qualitative Analysis, and 302. Quantitative Analysis I
303. Organic Chemistry I, or 305. Physical Chemistry I, and 304. Organic Chemistry II, or 306. Physical Chemistry II

XII. *Department of Biology*

301, 302. Botany
303. Comparative Osteology
304. Bacteriology
305. Invertebrate Zoölogy
306. Parasitology
(Students electing the Department take two courses throughout junior year. General Biology 201, 202 must be one of them, if not taken in sophomore year. Students who took Biology 201, 202 in sophomore year elect 303, 304, and 306 (*Requisite cognate course:* Chemistry 303, 304 through the year)

XIII. *Department of Geology*

301, 302. Structural Geology
303, 304. Mineralogy
305, 306. Evolution of Organisms and Man
(*Requisite cognate course:* Biology through the year, or Chemistry through the year, or Graphics and Surveying)

XIV. *Department of Psychology*

301. General Psychology 302. Social Psychology

Junior courses which are not included in any one of the Departments above:

302. Surveying 330. Ancient Oriental Literature
302. Physical Geography Field Artillery

SENIOR YEAR

I. Division of Philosophy, Literature, and Art

I. *Department of Philosophy*

401. Fundamental Problems of Philosophy
402. Present Philosophical Tendencies
405. History of Greek Philosophy
407, 408. Ethics
410. Hellenistic and Patristic Philosophy
411. Philosophy of Modern France
414. Philosophy of Religion
415. Philosophy and History of Modern Science

II. *Department of Classics*

401. Lucretius; 402. Roman Elegiac Poets
408. Greek Epic Poetry 411. Cicero's Political Writings
413. Tacitus 415. Greek Lyric Poets
416. Thucydides 420. Virgil
421, 422. Roman Law
423. English Literature and the Classics. 424. Classical Archaeology.

IIIa. *Department of Modern Languages. Germanic Section*

401, 402. German Literature since Goethe
403, 404. Modern Germany

IIIb. *Department of Modern Languages. Romanic Section*

401, 402. French Literature (Romantic Movement)
403, 404. French Literature (18th and 16th centuries)
405, 406. Advanced French Composition
407, 408. Dramatic Technique
409, 410. Spanish Literature
411, 412. Italian Literature

IV. *Department of English*

401. English Literature of the 18th century
402. Literary History of American Ideals
403. Old English. 404. Old English Poetry
405. Wordsworth and Coleridge. 406. Victorian Literature
407, 408. Advanced Composition
409. English Literature and the Classics
411. English Poetry of the Nineteenth Century

V. *Department of Art and Archaeology*

401. Renaissance and Modern Sculpture; 402. Greek Sculpture
403. Revival of Painting in Italy. 404. Modern Painting
405, 406. Classical Architecture
407. Perspective and Indication. 408. Applied Elements
409, 410. Free-hand Drawing

II. Division of History and Politics, and Economics

VI. *Department of History and Politics*

401, 402. Constitutional History of England
403. American Colonies. 404. American Democracy
405, 406. Local Government
407. International Law. 408. Diplomacy
409. The Renascence. 410. The Reformation
421, 422. Roman Law

VII. *Department of Economics and Social Institutions*

401. Money and Banking; 402. Public Finance
403. European Economic Policy
405. Labor Problems

406. Social Economics
407. Corporation Finance
408. Economics of Transportation

III. Division of Mathematics and Science

VIII. *Department of Mathematics*
401, 402. Functions of a Complex Variable

IX. *Department of Physics*
401, 402. Advanced Experimental Physics
403, 404. Theoretical Physics

Honors Courses in Mathematics and Physics
411, 412. Electricity and Magnetism
413, 414. Thermodynamics. Electron Theory
415, 416. Experimental Physics
401, 402. Celestial Mechanics. (Astronomy 401, 402)

X. *Department of Astronomy*
401, 402. Celestial Mechanics
403, 404. Practical Astronomy

XI. *Department of Chemistry*
For students who take four years of Chemistry
303. Organic Chemistry I, or 305. Physical Chemistry I and only one of 403. Quantitative Analysis IV, 405. Organic Chemistry III, 407. Physical Chemistry III and 409. Advanced Inorganic Chemistry I.
304. Organic Chemistry II or 306. Physical Chemistry II and only one of 404. Metallography, 406. Organic Chemistry IV, 408. Physical Chemistry IV and 410. Advanced Inorganic Chemistry II.

For students who take three years of Chemistry
401. Quantitative Analysis II, and 303. Organic Chemistry I, or 305. Physical Chemistry I.
304. Organic Chemistry II, or 306. Physical Chemistry II and only one of 402. Quantitative Analysis III, 404. Metallography, 406. Organic Chemistry IV, 408. Physical Chemistry IV and 410. Advanced Inorganic Chemistry II.

XII. *Department of Biology*
401. Comparative Anatomy of Vertebrates; 402. Embryology
403. Histology. 404. Histology, or 406. Palaeontology
407, 408. Physiology
412. Biological Chemistry

XIII. *Department of Geology*

401, 402. Introduction to Palaeontology
403, 404. Petrology
405, 406. Practical Geology
407, 408. Optical Mineralogy
409, 410. Economic Geology

XIV. *Department of Psychology*

402. History and Psychology of Education
403, 404. Experimental Psychology

Senior courses which are not included in any one of the Departments above:

401, 402. Sanskrit
401, 402. Heat Engines
—— Field Artillery

III. Graduation in Three Years

A student may qualify for graduation in three years if his work in the regular courses has been of superior excellence and if, during the two intervening summers, he has satisfactorily pursued independent study in accordance with the regulations given below. The purpose of this plan is to encourage good work and to facilitate admission to professional schools at the end of three years of undergraduate study.

1. The opportunity for graduation in three years is open to a student selecting either the departmental or the divisional plan in his last two years.

2. A student who has maintained a standing of first or second general group in his freshman year may on his request be enrolled as a candidate for graduation in three years. In his second year he will be allowed to choose junior courses which will enable him to meet, by the end of his third year, the departmental or divisional requirement for graduation.

A student who has fallen slightly short of second general group standing at the end of freshman year may, on motion of the Committee on the Course of Study, be enrolled as a candidate for graduation in three years.

3. A candidate for graduation in three years will follow courses of reading or of laboratory work during the summers. Each of these courses is intended to be the equivalent of a one-year regular course and is planned to test the student's

capacity for independent study. Formal instruction need not be given in them, and their satisfactory completion will be determined by written reports and special examination.

4. A student who, because of illness, summer employment, or other valid reason, is unable to devote his summers to the work described in the preceding paragraph, may qualify for graduation in three years by the following alternative method: Under the supervision of the appropriate Departments he may, during his second and third years, in addition to his normal schedule pursue special courses equivalent in requirements to the summer courses. In pursuing these special courses he will be subject to the same regulations as to standing, reports, and preliminary and comprehensive examinations, as a student following the summer courses.

5. A candidate for graduation in three years will choose, in addition to the summer work, courses from the list open to students following the four-year plan. He will take all the regular term examinations, except those in his departmental or divisional subjects at the end of his third year. In their place he will take comprehensive examinations in those subjects, covering the work of his last two years and the two summers.

6. A student who shall have maintained a standing of first or second general group in his regular courses during the three years, and who shall have completed one course each summer as defined in Section 3, or one special course in each of his second and third years as provided in Section 4, with the same general grade of excellence as that expected in the regular courses, will be qualified for graduation.

METHOD OF UNDERGRADUATE INSTRUCTION

Instruction in Physics, Chemistry, Biology, and Astronomy is given not only by means of lectures and formal tests upon textbooks, but also by means of practical experimental work in the several laboratories and in the Observatory. In Mathematics, besides the stated class exercises and occasional lectures, certain hours are set apart each week during which the instructors of the Department are accessible for informal consultation by all students who wish further explanation or discussion of such portions of their mathematical work as most

interest them or give them the most difficulty. In Geology, similarly, there is field work and constant informal resort to the Geological Museum, added to frequent conferences with the instructors in the several courses on the reading assigned.

Instruction in what may be called the reading departments —Philosophy, History and Politics, Economics and Social Institutions, Art and Archaeology, and the languages, is given chiefly by means of informal conferences on the reading assigned. A "course" consists, not of the lectures given in connection with it or of the study of a particular textbook relied on by the lecturer, but of a prescribed body of reading to which the lectures given are complementary. In each course the student is made responsible to a particular preceptor for his reading, and reports to him once a week for conference. The student is expected to attend every conference, and may be absent only for unavoidable reasons. Failure to keep his preceptorial appointments will affect his final standing.

At each conference the preceptor usually meets from three to six of the men assigned him. The methods of conference differ, of course, with the character of the subject, but are always informal, being intended not as a quiz or recitation or lecture, nor as a method of coaching, but, so far as the preceptor is concerned, as a means of finding out how thoroughly and intelligently the student has done his reading, and, so far as the student is concerned, as a means of stimulation and enlightenment with regard to the study in hand. His work is explained to him where it is obscure, and its scope and implications are extended out of the wider reading and maturer scholarship of the preceptor. Study centers upon these conferences, as in the scientific departments it centers upon the laboratory. They are meant to supply to study the life which it cannot have in the formal exercises of the classroom, and to bring the students into an intimate contact with their teachers which is hardly possible in other methods of instruction.

One result of this method of instruction is to lay the principal emphasis of work upon the constant reading required, upon what is ordinarily called "term work," rather than upon preparation for occasional examinations. In reckoning the "standing" of a student more weight is given to his work with his preceptor than to his performance in examination. Each preceptor is expected to report in departmental meeting upon

the work of the men assigned him, and it is only upon his recommendation that they are admitted to examinations. He may recommend the debarment from examination of any of the men assigned to him who seem to have neglected their work or to have done it too indifferently. He makes no formal report to any university officer of their absences from his appointed conferences or of their attendance, but forms his own estimate of their thoroughness and faithfulness and gives his judgment upon the basis of an intimate observation.

Members of the Faculty of all ranks do "preceptorial" work; those who lecture or conduct the formal class exercises acting as preceptors as well as those who devote the principal part of their time to this special method of teaching.

HONORS

1. Two kinds of Honors are awarded, whether the candidate follows the four-year plan or the three-year plan: *General Honors,* for work of superior excellence in all courses, and *Special Honors,* for work of superior excellence in the courses of a Department.

2. *General Honors,* determined by the standing attained in all the courses taken, are awarded at the end of each year to each class according to the following standard:

Highest, for an average standing of 1.2 or better.
High, for an average of 1.2+ to 1.7;
Honors, for an average standing of 1.7+ 2.2.

3. *Special Honors,* determined by the standing attained in the departmental courses of the junior and senior years, are awarded only at graduation and are of three grades:

Highest, for an average standing of 1;
High, for an average standing of 1+ to 1.5;
Honors, for an average standing of 1.5+ to 2.

4. A Department may require a candidate for Special Honors to take in each of his last two years a course, admission to which is limited to students capable of doing work of superior excellence.

5. A candidate for Special Honors who is a candidate for graduation under the three-year plan may substitute one of the summer courses of his Department for one of the courses of his last year.

THE SCHOOL OF ENGINEERING

Course of Study

THE Department of Civil Engineering was established in 1875 through the benefactions of the late Mr. John C. Green. Its purpose was to afford young men who wish an engineering education the opportunity of pursuing an engineering course in the liberal environment of a university.

The Princeton Engineering School now offers a group of four-year undergraduate courses in which special study in Chemical, Civil, Electrical, Mechanical, and Mining Engineering subjects will be pursued, and on the satisfactory completion of which the degree of Bachelor of Science in Engineering will be granted.

The plan became operative in the case of Civil, Mechanical and Electrical Engineering in September 1921. In the case of Chemical and Mining Engineering it will go into effect in September 1922.

These new courses are planned chiefly to serve the needs of three kinds of students.

For those who wish to complete their college course in four years, and then to enter at once on engineering work, the plan provides a course divided nearly equally between liberal studies and the fundamental engineering subjects. It is believed that this offers a better preparation for the careers such students have in mind than does a four-year course more purely technical.

Secondly, the plan is devised to meet the needs of students who intend, upon graduation, to enter one of the many fields of modern industry or business in which success depends so largely upon a fundamentally sound and liberal education coupled with training in the basic engineering principles.

Finally, students who wish to begin work adequately equipped in one particular branch of engineering will be enabled, by the opportunities for elective specialization afforded in the plan, to obtain the professional or technical degree after one year or at the most two years of graduate study.

The curriculum of the first two years is made up almost

wholly of academic studies and does not differ greatly from that of the corresponding years in the course in liberal arts. Candidates for the degree of Bachelor of Arts or Bachelor of Science, by properly choosing their studies in mathematics and sciences, are able to transfer to the engineering courses at the end of their freshman, and in some cases at the end of their sophomore, year without loss of time. Similarly, studies taken in the Engineering School are accepted for credit in the course in liberal arts.

The curriculum of the junior year consists in part of fundamental technical subjects which form the groundwork of all engineering knowledge, and in part of liberal studies. The curriculum of the senior year consists in part of technical studies chosen in one or more of the specialized fields of engineering, and in part of liberal studies.

In all the engineering courses, the underlying purpose is to teach fundamental principles, with so much of the technique as may be necessary to show the applications of these principles and to illustrate engineering methods.

A student who has satisfactorily completed one of the four-year undergraduate courses in engineering will receive the degree of Bachelor of Science in Engineering.

A student who has completed one of the undergraduate courses can, in one additional year, qualify for the engineering degree appropriate to the course pursued, except that in the case of Mining Engineering two additional years may be required.

The plans of study for this fifth year in Civil, Mechanical, and Chemical Engineering are now being prepared and will be published later. The present graduate course in the School of Electrical Engineering will coördinate with the undergraduate course in Electrical Engineering in such a manner that the advanced degree may be obtained upon the completion of a fifth year of work.

The Courses in Engineering

The programmes of study for the new four-year undergraduate courses are as follows:

The programme of study for the freshman year is the same for all courses.

FRESHMAN YEAR FOR ALL COURSES

First Term		*Second Term*	
Mathematics 103 (Analytical Geometry)	3	Mathematics 104 (Differential Calculus)	3
*Modern Language	3	*Modern Language	3
**Chemistry 101 or 103	4	**Chemistry 102 or 104	4
English 101a	3	English 102a	3
Engineering Drawing 101	3	Engineering Drawing 102	3
Hygiene	2	Industrial Development	2
Total hours per week	18	Total hours per week	18

All freshmen are required to take work in general Physical Education for three hours a week throughout the year.

CHEMICAL ENGINEERING

SOPHOMORE YEAR

First Term		*Second Term*	
Mechanics 205	3	Mechanics 206	3
Mathematics 203 (Integral Calculus)	3	Steam Engineering	2
Physics	4	Physics	4
Analytical Chemistry 203	4	Analytical Chemistry 204	4
Descriptive Geometry 201	2	Descriptive Geometry 202	2
***German	3	***German	3
Total hours per week	19	Total hours per week	18

JUNIOR YEAR

First Term		*Second Term*	
Mechanics of Materials 301	4	Testing Laboratory	2
Quantitative Analysis 307	4	Physical Chemistry 306	5
Thermodynamics 309	3	Heat Power Engineering 310	3
Principles of Economics 301	3	Problems of Economics 302	3
Organic Chemistry 303	4	Organic Chemistry 304	5
Total hours per week	18	Total hours per week	18

The Chemical Engineers will spend eight weeks during the summer between the Junior and Senior years, in a chemical plant or laboratory approved by the Department of Chemical Engineering.

---

* Students taking Chemical Engineering must take German.

** Students who enter without Chemistry will take the elementary course, Chemistry 101-102.

*** If at the end of freshman year the student has received credits for three years of German, he may substitute for the sophomore German an elective course.

SENIOR YEAR

First Term		*Second Term*	
Industrial Chemistry	3	Industrial Chemistry	3
Physical Chemistry 407	4	Physical & Electrical Chemistry or Advanced Organic Chemistry	5
Electrical Engineering 307	3	Electrical Engineering 308	3
Elective in Economics	3	Elective in Economics	3
English and Public Speaking 401	2	Business Methods 402	2
Elective	3	Elective	3
Total hours per week	18	Total hours per week	19

CIVIL ENGINEERING

SOPHOMORE YEAR

First Term		*Second Term*	
Mechanics 205	3	Mechanics 206	3
Mathematics 203 (Integral Calculus)	3	Mathematics 204 (Integral Calculus and Differential Equations)	3
Physics	4	Physics	4
Analytical Chemistry 203	4	Geology 204	3
Descriptive Geometry 201	2	Descriptive Geometry 202	2
*Modern Language	3	*Modern Language	3
Total hours per week	19	Total hours per week	18

JUNIOR YEAR

First Term		*Second Term*	
Mechanics of Materials 301	4	Hydraulics 302	3
Materials Laboratory 303	2	Reinforced Concrete	3
Thermodynamics 309	3	Steam Engineering	3
Principles of Economics 301	3	Problems of Economics 302	3
Surveying	3	Railway Curves	3
Elective	3	Elective	3
Total hours per week	18	Total hours per week	18

The Civil Engineers will spend eight weeks during the summer between Junior and Senior years in a camp, for work in Surveying.

* If at the end of freshman year the student has received credits for three years of French or German, he may substitute for the sophomore Modern Language an elective course.

SENIOR YEAR

First Term		*Second Term*	
Bridge Design	4	Bridge Design	4
Water Supply	3	Highways	3
Electrical Engineering 307	3	Electrical Engineering 308	3
Elective in Economics	3	Elective in Economics	3
English and Public Speaking 401	2	Business Methods 402	2
Elective	3	Elective	3
Total hours per week	18	Total hours per week	18

ELECTRICAL ENGINEERING

SOPHOMORE YEAR

First Term		*Second Term*	
Mechanics 205	3	Mechanics 206	3
Mathematics 203 (Integral Calculus)	3	Mathematics 204 (Integral Calculus and Differential Equations)	3
Physics	4	Physics	4
Analytical Chemistry 203	4	Steam Engineering	3
Descriptive Geometry 201	2	Descriptive Geometry 202	2
*Modern Language	3	*Modern Language	3
Total hours per week	18	Total hours per week	18

JUNIOR YEAR

First Term		*Second Term*	
Mechanics of Materials 305	4	Kinematics	3
Materials Laboratory 303	2	Machine Design	3
Thermodynamics 309	3	Heat Power Engineering 310	3
Principles of Economics 301	3	Problems of Economics 302	3
Electrical Engineering 307	3	Electrical Engineering 308	3
Physics	3	Physics	3
Total hours per week	18	Total hours per week	18

The Electrical Engineers will spend eight weeks during the summer between Junior and Senior years in a manufacturing or power plant approved by the Department of Electrical Engineering.

* If at the end of freshman year the student has received credits for three years of French or German, he may substitute for the sophomore Modern Language an elective course.

SENIOR YEAR

First Term		*Second Term*	
Electrical Theory	3	Transmission and Distribution	2
Electrical Machine Design	3	Electrical Machine Design	3
Electrical Measurements	3	Electrical Measurements	3
Elective in Economics	3	Elective in Economics	3
English and Public Speaking 401	2	Business Methods 402	2
Mechanical Laboratory	2	Hydraulics 302	3
Elective	3	Elective	3
Total hours per week	19	Total hours per week	19

MECHANICAL ENGINEERING

SOPHOMORE YEAR

First Term		*Second Term*	
Mechanics 205	3	Mechanics 206	3
Mathematics 203 (Integral Calculus)	3	Mathematics 204 (Integral Calculus and Differential Equations)	3
Physics	4	Physics	4
Analytical Chemistry 203	4	Steam Engineering	3
Descriptive Geometry 201	2	Descriptive Geometry 202	2
*Modern Language	3	*Modern Language	3
Total hours per week	19	Total hours per week	18

JUNIOR YEAR

First Term		*Second Term*	
Mechanics of Materials 301	4	Hydraulics 302	3
Materials Laboratory 303	2	Kinematics	3
Thermodynamics 309	3	Heat Power Engineering 310	3
Principles of Economics 301	3	Problems of Economics 312	3
Mechanical Laboratory	3	Machine Design	3
Elective	3	Elective	3
Total hours per week	18	Total hours per week	18

The Mechanical Engineers will spend eight weeks during the summer between Junior and Senior years in a manufacturing or power plant approved by the Department of Mechanical Engineering.

* If at the end of freshman year the student has received credits for three years of French or German, he may substitute for the sophomore Modern Language an elective course.

SENIOR YEAR

First Term		*Second Term*	
Steam and Gas Engine Design	4	Metallurgy	3
Boiler Design	3	Mechanical Laboratory and Graphics	4
Electrical Engineering 307	3	Electrical Engineering 308	3
Elective in Economics	3	Elective in Economics	3
English and Public Speaking 401	2	Business Methods 402	2
Elective	3	Elective	3
Total hours per week	18	Total hours per week	18

MINING ENGINEERING

SOPHOMORE YEAR

First Term		*Second Term*	
Mechanics 205	3	Mechanics 206	3
Mathematics 203 (Integral Calculus)	3	Surveying	3
Physics	4	Physics	4
Analytical Chemistry 203	4	Analytical Chemistry 204	4
Descriptive Geometry 201	2	Descriptive Geometry 202	2
Geology 203	3	Geology 204	3
Total hours per week	19	Total hours per week	19

The Mining Engineers will spend four weeks during the summer following the Sophomore year in camp, for work in Surveying.

JUNIOR YEAR

First Term		*Second Term*	
Mechanics of Materials 301	4	Steam Engineering	3
Geology	3	Geology	3
Mineralogy 303	3	Mineralogy 304	3
Principles of Economics 301	3	Problems of Economics 302	3
Electrical Engineering 307	3	Electrical Engineering 308	3
Elective	3	Elective	3
Total hours per week	18	Total hours per week	18

The Mining Engineers will take a course in Practical Geology during the summer for four weeks.

SENIOR YEAR

First Term		*Second Term*	
Geology	3	Geology	3
Metallurgy	3	Metallurgy	3
Mineralogy 407	3	Mineralogy 408	3
Elective in Economics	3	Elective in Economics	3
English and Public Speaking 401	2	Business Methods 402	2
Thermodynamics 309	4	Hydraulics 302	4
Total hours per week	18	Total hours per week	18

Electives will be arranged in English, History, Philosophy and certain other Departments. The choice of these electives will be subject to restrictions which will be announced later.

COURSES OF STUDY IN CIVIL ENGINEERING FOR THE CLASSES OF 1922, 1923, AND 1924

In the academic year 1921-1922 the freshman engineering students will pursue the program of study given in the new plan. The students in the three upper classes will follow the old programme, which is appended.

The students graduating in 1922, 1923, and 1924 will receive, as heretofore, the degree of Civil Engineer.

SOPHOMORE YEAR

First Term		*Second Term*	
Mechanics 205	3	Mechanics 206	6
Physics 205	3	Physics 206	3
Geology 203	3	Elective	3
Descriptive Geometry 201	2	Descriptive Geometry 202	2
Surveying 201	3	Surveying 202	3
Mathematics 203	3		
Total hours per week	17	Total hours per week	17

JUNIOR YEAR

First Term		*Second Term*	
Mechanics of Materials 301	4	Hydraulics 302	4
Materials Laboratory 303	2	Hydraulic Laboratory 304	1
Kinematics 305	2	Machine Design 306	3
Electrical Engineering 307	3	Electrical Engineering 308	3
Thermodynamics 309	3	Heat Power Engineering 310	3
Railway Engineering 311	3	Structures 312	3
Total hours per week	17	Total hours per week	17

The civil engineers will take a course in Railroad Surveying during the three weeks immediately preceding the opening of First Term.

SENIOR YEAR

First Term		*Second Term*	
Principles of Economics 301	3	Problems of Economics 302	3
English 401	2	English 402	2
Bridge Design 403	4	Higher Structures 404	4
Reinforced Concrete 405	4	Concrete Construction 406	4
Electives	6	Electives	6
Total hours per week	19	Total hours per week	19

Technical electives in Civil Engineering include, among others:

First Term		*Second Term*	
Water Power 407	3	Water Supply 408	3
Highway Engineering 409	3	Sewerage 410	3
Railway Economics 411	3	Gas Engines 412	3
		Municipal Engineering 414	3

PART IV

DEPARTMENTS OF INSTRUCTION

COURSES OF INSTRUCTION

NOTE:—*Freshman courses are numbered between 101 and 200, sophomore courses between 201 and 300, junior courses between 301 and 400, senior courses between 401 and 500. Graduate courses are numbered from 501 upward.*

All courses are three-hour courses unless otherwise described.

Odd numbered courses are offered in First Term, even numbered in Second Term.

I. DIVISION OF PHILOSOPHY, LITERATURE AND ART

I. DEPARTMENT OF PHILOSOPHY

THE PRESIDENT, PROFESSORS JOHNSON, BOWMAN, SPAULDING, FITE (CHAIRMAN), WHITNEY, LONGWELL, HENDEL, DR. BUERMEYER, MR. BUTT, AND MR. MORE

201, 202. Introduction to Philosophy: Psychology, Ethics, and General Philosophy. Sophomore required course. Lecturer, Professor Fite; classroom instructors, Professors Johnson, Bowman, Spaulding, Whitney, Longwell, Hendel, Scoon, and Dr. Buermeyer.

301. History of Philosophy. Greek and Mediaeval Philosophy. Prerequisite to course 302. Lecturer, Professor Longwell; Preceptors, Professors Whitney, Longwell, and Hendel, and Mr. Butt.

302. History of Philosophy. Modern Philosophy. Prerequisite course 301. Lecturer, Professor Longwell; Preceptors, Professors Johnson, Longwell and Hendel, and Mr. Butt.

303. Principles of Psychology. Nature and scope of psychology; relation of body and mind; the subconscious; the stream of thought; the consciousness of self; emotion; voluntary activity, etc. Lecturer, Professor Johnson; Preceptors, Professor Johnson and Mr. Butt.

304. Logic. A study of the methods, criteria and processes involved in the search for truth. Lecturer, Professor

Whitney; Preceptors, Professor Whitney and Mr. Butt.

*401. Fundamental Problems of Philosophy. Lecturer, Professor Bowman; Preceptors, Professor Hendel and Dr. Buermeyer.

*402. Present Philosophical Tendencies. A critical and comparative survey of such tendencies as idealism, realism, pragmatism and phaenomenalism in their relation to science, religion, history and art. Lecturer, Professor Spaulding; Preceptors, Professor Spaulding and Dr. Buermeyer.

*405. History of Greek Philosophy. Professor Bowman.

*407. Ethics. A general study of the moral problem and of the types of ethical theory. Professor Fite.

*408. Social and Political Ethics. The nature of social and political institutions from the point of view of ethics; the moral basis of social and political obligation. Lecturer, Professor Hendel; Preceptors, Professor Hendel and Dr. Buermeyer.

*410. Hellenistic and Patristic Philosophy. A study of Greek thought, philosophical and religious, from Plato to Chrysostom. A knowledge of the Greek language is desirable, though not required. Senior course, open to juniors. Mr. More.

*411. The Philosophy of Modern France. A study of the personalities and points of view dominant in the thought of France from the Renaissance to the end of the nineteenth century. Senior course, open to juniors. Professor Hendel.

*414. Philosophy of Religion. The nature and meaning of religious experience in relation to conceptions of ultimate reality. Professor Longwell.

*415. Philosophy and History of Modern Science. A non-technical course in the development of scientific thought from the time of Copernicus and Galileo to the present. Lecturer, Professor Spaulding; Preceptors, Professor Spaulding and Dr. Buermeyer.

For graduate courses in Philosophy see Part IX of this Catalogue.

---

* Also listed as a graduate course.

II. DEPARTMENT OF CLASSICS

DEAN WEST, PROFESSORS †WESTCOTT, †ROBBINS, PRENTICE, CAPPS, STUART, ABBOTT (CHAIRMAN), DAVID MAGIE, BASORE, JOHNSON, SCOON, DEWING, WEBER, AND MR. STEARNS

101, 102. Elementary Greek. For beginners. Open to students in all four classes. Professor Scoon.

103. Selections from prose authors. For those who have taken course 101, 102, or have offered two units of Greek on entering the University. Professor Weber.

105. Plato. The *Apology,* the *Crito,* and selections from other dialogues. Open to those who have offered three units of Greek on entering the University, or have taken course 103, and to those who on finishing course 101, 102 are recommended for admission to this course, and required of candidates for the degree of A.B., not taking Latin 107, 108. Professors Hutson and Johnson.

106. Herodotus, Book VII, and the *Alcestis* of Euripides. Professor Hutson.

107. Livy. The object of the course is to develop ability to read Latin at sight. Freshman course, required of all candidates for the degree of A.B., except those taking Greek 105, 106, and an elective for candidates for the degree of B.S. Professors Magie, Basore, Johnson, Dewing, Scoon, Weber, and Mr. Stearns.

108. Tacitus, Pliny, and one play of Terence. With the upper divisions the *Annals* will be read; with the lower Pliny's *Letters.* Freshman course, required of all candidates for the degree of A.B. and an elective for candidates for the degree of B.S. Professors Magie, Basore, Johnson, Dewing and Weber,

201. Greek Tragedy. Selected Plays. Lectures on the development of the drama, on the presentation of plays, on the authors and their works. Professor Capps.

202. The *Odyssey.* Lectures and assigned readings in the history of the epic and the romance. Professor Capps.

203. Roman Drama, chiefly Plautus. Attention will be given to such subjects as the construction of the plot, the portrayal of character, and the presentation of plays. Professors Abbott, Stuart, Magie, and Basore.

†Absent on leave.

204. Horace and Catullus. Horace: *Odes* and *Satires;* Catullus: Selections. Professors West, Abbott, Stuart, Magie and Basore.

303. Greek Comedy. Two plays of Aristophanes will be studied closely, and a third read rapidly. Professor Capps. [Not given, 1921-1922.]

305. Roman Satire. The *Satires* and the *Epistles* of Horace, and the *Satires* of Juvenal. In addition, selections from other writers, illustrative of the development of Roman Satire, will be read. Professor Stuart.

306. Greek Epic Poetry. The *Iliad* will be read in class, two hours each week. The third hour will be given to lectures and conferences, collateral reading, and reports. Professor Prentice.

308. Latin Literary and Historical Essays. The minor works of Tacitus, with a preliminary study of Horace's literary epistles. Professor Basore.

309. Greek History. Two lectures will be given each week on Greek History. The third hour will be devoted to preceptorial conferences on reading, in English, on special topics. [May count as a course in History.] Professor Prentice.

310. Roman History to 400 A.D. Roman imperialism, and the main governmental, economic, social, and religious developments in the Republic and the Empire. [May count as a course in History.] * Professor Johnson.

311. Greek Tragedy. Aeschylus and Sophocles. Selected plays. Professor Capps.

312. Virgil. The *Bucolics,* portions of the *Georgics,* and the *Aeneid,* Books VII-XII. Study of the literary relationships, the poetic technique, and the significance from the standpoint of contemporaries of these works. Professor David Magie.

[Juniors electing this course must have attained a standing above third group in their other classical courses.]

*†316. Thucydides. Books VI and VII, Thucydides' account of the Sicilian Expedition will be read. Professor Capps.

317. Latin Literature of the Republic. Professor Stuart. [Not given, 1921-1922.]

---

* Also listed as a graduate course.

† The Nicomachean Ethics of Aristotle will be given in place of Thucydides if preferred by the class.

318. Latin Literature of the Empire. Professor Basore. [Not given, 1921-1922.]

319. Theocritus. Reading of Theocritus, Bion, and Moschus. Professor Johnson.

320. Plato. *Phaedo, Protagoras, Gorgias, Symposium, Republic,* in whole or in part. Professor Scoon. [Not given, 1921-1922.]

322. St. Paul. First and Second Epistles to the Corinthians; selections from the other Pauline Epistles. A study of the language and content, together with the historical and philosophical background. Professor Prentice. [Not given, 1921-1922.]

323. Greek Culture and Institutions: A study of the heritage of modern civilization from the ancient Greeks. Knowledge of the Greek language not required. [Not given, 1921-1922.]

324. Greek Tragic Drama. Use of the Greek language not required. Euripides: *Alcestis, Iphigenia among the Tauri,* and *Hippolytus.* Sophocles: *Oedipus Tyrannus* and *Philoctetes.* Aeschylus: *Agamemnon, Choephori* and *Eumenides.* The plots, dramatic composition and technique will be studied and criticized; the literary and dramatic value of the various scenes will be discussed. Also the characters, and the methods of delineation, the religious, moral, political, and social ideas contained in these plays, the civilization of the ancient Greeks, their ideals and standards, as exhibited in their drama. Written notes or brief essays will be required. Professor Prentice.

325, 326. Elementary Greek for students of Natural Science. A practical course designed to meet the needs of students of the natural sciences, and of mathematics and architecture, who have no knowledge of Greek. Especial attention will be given to scientific nomenclature and the principles of word-formation as exemplified in the sciences. Open only to upperclassmen and graduate students. Professor Weber. [Not given, 1921-1922.]

*401. Lucretius. Reading of selected books of the *De Rerum Natura.* Professor Basore.

* Also listed as a graduate course.

402. Roman Elegiac Poets. Lectures on the history of the elegy; reading of selections from Tibullus, Propertius, and from the *Amores* of Ovid. Professor Stuart. [Not given, 1921-1922.]

411. Cicero's Political Writings. Cicero's *De Republica* and *De Legibus*, together with some of his speeches and letters. Professor David Magie. [Not given, 1921-1922.]

*413. Tacitus. The *Annals* and *Histories*. Professor Westcott. [Not given, 1921-1922.]

415. Greek Lyric Poets. A survey of Greek lyric poetry from the seventh century to the third century. Professor Robbins. [Not given, 1921-1922.]

*421, 422. Roman Law. The History and Institutes of Roman Law. Students in the Department of Classics, and others who desire to do so, will read the *Institutes* of Gaius and of Justinian in Latin. Professor Westcott. [Given by Dr. Carpenter in 1921-1922.]

426. (English 410). English Literature and the Classics; the quality of English Literature as variously determined by the influence of the Classics; the spirit of the classics as manifest in the form and content of English Literature. Readings in some ten or fifteen authors, ancient and modern. Professor Osgood.

424. (Art 402.) Classical Archaeology. A general outline of Greek vase painting and a careful study of the most recent archaeological discoveries in architecture, sculpture, painting and the minor arts. Professor Elderkin; Preceptors, Professors Elderkin and Smith.

Candidates for Honors in Classics are requested to consult Professor Capps or Professor Basore.

For graduate courses in Classics, see Part IX of this Catalogue.

* Also listed as a graduate course.

III. DEPARTMENT OF MODERN LANGUAGES

PROFESSORS VREELAND, GAUSS (CHAIRMAN), BUFFUM, COLLINS, HOSKINS, BLAU, †PRIEST, MARDEN, ARMSTRONG, BENDER, STUART, THAYER, CRITCHLOW, KOREN, CONS, AND CHAPMAN; DR. TARR, MR. CLEMENT, DR. HASTINGS, MR. LOWE, MR. VERA, DR. COLBURN, MR. BASSETT, MR. FROIS-WITTMAN, MR. SMITH, AND MR. BRETZ

GERMANIC SECTION

101, 102. Beginners' German. German will generally be used. Professor Hoskins.

103, 104. Intermediate German. Reading of short stories and descriptive prose, with exercises, syntax and composition. German will generally be used. Prerequisite: Entrance German A or German 101, 102. Prerequisite to German 105, 106 and German 201, 202. Professors Bender, Hoskins and Thayer.

105, 106. Advanced German. Reading of historical, descriptive, and narrative prose, with exercises in composition. German will generally be used. Prerequisite: Entrance German B or German 103, 104. Either German 105, 106 or German 201, 202 is prerequisite to the courses of junior and senior years.‡ Professor Blau.

201, 202. German Literature since 1748. Prerequisite: either Entrance German B or German 103, 104. Either German 201, 202 or German 105, 106 is prerequisite to the courses of junior and senior years.‡ Professors Thayer and Blau.

301, 302. German Literature from Opitz to Schiller. Lectures and collateral reading. Junior course, open to seniors. Prerequisite: either German 105, 106 or 201, 202.‡ Professor Hoskins.

303, 304. Goethe's Life and Works. Junior course, open to seniors. Prerequisite: either German 105, 106 or German 201, 202.‡ Professor Blau.

*401, 402. The Romantic School in Germany and German

† Absent on leave.

‡ Students intending to elect the German courses of Junior and Senior years are especially advised to take German 201, 202.

* Also listed as a graduate course.

Literature since Goethe's death. Lectures and preceptorial reading. Senior course, open to juniors. Prerequisite: either German 105, 106 or German 201, 202.‡ Professor Thayer.

*403, 404. Modern Germany. An historical survey of modern German political and social institutions. Senior course, open to juniors. Prerequisite; either German 105, 106 or German 201, 202.‡ Professor Bender.

Romanic Section

101, 102. Beginners' French. Grammar, composition, and reading. French will generally be used. No credit given to upperclassmen for this course. Professor Koren and Mr. Clement.

103, 104. Intermediate French. Rapid reading, conversation, and composition. French will generally be used. Prerequisite: Entrance French A, or French 101, 102. Prerequisite to French 203, 204. Professors Critchlow, Buffum, and Mr. Clement and Mr. Bassett.

105, 106. Advanced French. French history and institutions. Composition and discussions. Prerequisite: Entrance French B or French 103, 104. French will be used exclusively. Professors Buffum, Critchlow, Chapman, Cons; Dr. Hastings, Mr. Frois-Wittman, and Mr. Lowe.

107, 108. Beginners' Spanish. Grammar, composition, and reading of modern Spanish authors. Freshman course open to sophomores. Prerequisite to Spanish 203, 204. Professor Marden, Dr. Colburn, Mr. Vera, and Mr. Smith.

201, 202. Sophomore French. General introduction to the study of French literature. Prerequisite: French 103, 104 or Entrance French B. Professor Vreeland, Dr. Hastings, and Mr. Lowe.

203, 204. Spanish. Readings from Spanish and Spanish-American authors, composition, and oral practice. Prerequisite: Spanish 101, 102. Dr. Tarr, Dr. Colburn, and Mr. Bretz.

205. Italian. Grammar, composition and reading. Open to sophomores, juniors and seniors. Prerequisite to Italian 206. Professor Koren.

* Also listed as a graduate course.

206. Italian. Dante, *Divina Commedia; Inferno.* Prerequisite: Italian 205. Prerequisite to Italian 305. Professor Gauss.

301, 302. French. French Classical Literature. Junior course, open to seniors. Prerequisite: French 201, 202. Professors Chapman and Collins.

†305. Italian. Dante: *Vita Nuova* and *Purgatorio.* Prerequisite: Italian 206. Prerequisite to Italian 306. Professor Koren. [Not given, 1921-1922.]

†306. Italian. Dante: *Paradiso.* Prerequisite: Italian 305. Professor Koren. [Not given, 1921-1922.]

307. Spanish. Modern Spanish Drama. Advanced composition. Junior course, open to seniors. Prerequisite: Spanish 203, 204. Dr. Tarr.

308. Spanish. Modern Spanish Novel. General Survey of Spanish Literature. Junior course, open to seniors. Prerequisite: Spanish 307. Dr. Tarr.

*401, 402. French. The Romantic Movement. Lectures and preceptorial reading. Senior course, open to juniors. Prerequisite: French 201, 202. Professor Gauss.

*403. French Literature of the Eighteenth Century. Senior course, open to juniors. Prerequisite: French 201, 202. Professor Stuart.

*404. French Literature of the Sixteenth Century. Senior course, open to juniors. Prerequisite: French 201, 202. Professor Cons.

*405, 406. Advanced French Composition, Pronunciation, and style. Senior course, open only to students in the Department of Romance Languages. Professor Armstrong.

*407, 408. Dramatic Technique. Open to approved students. Professor Stuart.

*409. Spanish. Spanish Literature of the Seventeenth Century. Composition, essays. Prerequisite: Spanish 307, 308. Dr. Tarr.

410. Spanish. The Contemporary Literature of Spain and Spanish America. Prerequisite: Spanish 409. Dr. Tarr.

---

* Also listed as a graduate course.

† Courses 305, 306 and 411, 412 are given in alternate years.

†411. Italian. Selections from Petrarch, Boccacio, and authors of the 15th and 16th centuries. Prerequisite: Italian 206. Prerequisite to Italian 412. Professor Koren.

†412. Italian. Modern Italian authors. Prerequisite: Italian 411. Professor Koren.

For graduate courses in Modern Languages, see Part IX of this Catalogue.

IV. DEPARTMENT OF ENGLISH

PROFESSORS HENRY VAN DYKE, HARPER, PARROTT, COVINGTON, SPAETH, OSGOOD (CHAIRMAN), NOYES, GEROULD, ROOT, CROLL, KENNEDY, MACDONALD, HEERMANCE, MURCH AND SHELLABARGER; MESSRS. BROWN, TAYLOR, SANDIDGE, DURLING, RONDTHALER, HELM

101, 102*a*. Literature and Composition. The aim of the course is to develop and train intelligent appreciation of the fundamental qualities of good literature and composition, such as imagination, clarity of thought, structure, and effective expression. This aim is accomplished by the reading and analysis of certain masterpieces of prose and verse from the later nineteenth century writers, English and American, and by the writing of frequent themes which shall express, under the stimulus of these masterpieces, the student's personal thought and observation. Elective, for A.B. and B.S. freshmen; required of C.E. freshmen. Professor Root and preceptors.

101, 102*b*. Public Speaking and Debate. A study of the fundamentals of public speaking and debate, involving the gathering and investigation of material, its logical organization, and presentation. Brief-drawing from models of eloquence and from individual research; composition and oral delivery; development of the image-making process; practice in speaking from briefs. Offered to freshmen who enter the Cliosophic or the American Whig Society who expect to specialize in debate. Substitute for 101, 102*a*. Limited to fifty men. Professor Covington.

† Courses 305, 306 and 411, 412 are given in alternate years.

201, 202. History of English Literature. A survey of English Literature from the earliest times to the Victorian Age. Lectures; oral and written recitations; reports on required reading. The reading in this course is designed to illustrate the various periods in the history of English Literature. Professor Heermance and preceptors.

301. English Drama: Shakespeare. A study of some of Shakespeare's representative plays. Unrestricted course. Professor Spaeth and preceptors.

302. English Drama: its History and Development. The development of the drama will be traced from its mediaeval origin to the nineteenth century. Special attention will be devoted to the Elizabethan drama, but characteristic specimens of the later drama under classical and romantic influences will also be read. Restricted course. Professor Parrott and preceptors.

*303. Elements of Poetry. The object is to introduce the student to the understanding and enjoyment of poetry as an art. The nature of poetry as distinguished from the other arts; its origin; its kinds; the most important forms and their history. Restricted course. Professor Croll and preceptors.

304. Elements of the English Language. A historical study of the words and forms of modern English. The nature and beginning of human speech; the growth of the English vocabulary; the decay of grammatical inflections; the meaning and connotation of words; "good English," dialects, slang; American English. The aim of the course is to give the student a wider and more intelligent command of the vocabulary and idiom of his native tongue. Restricted course. Professor Root and preceptors.

305. Chaucer and Mediaeval Narrative. A study of mediaeval story-telling as practised by Chaucer and other writers of his age. It is the purpose of the course to introduce the student by this means to the life and ways of thinking characteristic of the Middle Ages. Restricted course. Professor Gerould.

*306. Spenser and Milton. A study of their works and of

* Also listed as a graduate course.

their relation to the Renaissance and the Reformation. Restricted course. Professor Harper.

307, 308. Advanced Public Speaking. Extemporaneous speaking on historic and current topics. For 1921-22, the topics will be largely drawn from the historical and documentary origins of the American government. The psychology of public speaking. Interpretation and oral reading of literary masterpieces. Open to students who have taken the freshman course in Public Speaking, and not to be taken as an alternative to other upper-class courses in the Department. Restricted course. Professor Covington.

310. The Literary History of American Ideals. Study of the development and expression of American ideals in their religious, political, cultural, and social aspects as reflected in the literature produced in America from Jonathan Edwards to Walt Whitman, both as an expression of the American spirit and in its relation to the main currents of European thought. The reading will accordingly include selections from British and Continental writers whose ideas have vitally influenced America, or who express a European assessment of American ideas. Unrestricted course. Professor Spaeth and preceptors.

401. English Literature of the Eighteenth Century. A study of the leading poets and prose writers from Swift to Burns, and of the literary and social ideas which they reflect. The Queen Anne wits and the school of sense; Sterne and the school of sensibility; Fielding and the beginnings of the English novel; Dr. Johnson and the Literary Club. Unrestricted course. Professor Root and preceptors.

403. Old English. Introductory. A study of Old English grammar and syntax, and a general survey of Old English literature, with selected illustrative reading in prose and poetry. This course is designed to give the student a mastery of the forms of the language, and a knowledge of the history of the literature, in preparation for more advanced study of Old English. Restricted course: prerequisite to English 404. Professor Kennedy.

404. Old English Poetry. A study of *Beowulf*, with the

reading, for purposes of illustrative comparison, of selections from the Old English Christian poems. It is the design of this course, in connection with the reading of these poems, to acquaint the student with the structure of Old English poetry, its development in literary style, and the influence upon its development of historical, cultural, and literary factors. Restricted course: English 403 is prerequisite. Professor Kennedy.

*405. Wordsworth and Coleridge. Their part in the Revolutionary movement and their service in renovating English poetry. Restricted course. Open to graduate students in 1921-1922 and alternate years thereafter. Professor Harper.

406. Victorian Literature. The main currents of thought, philosophical, social, and aesthetic, of the period from 1832 to the death of Tennyson, and the reflection of these tendencies in the literature of the age. Among the authors studied will be J. S. Mill, Newman, Carlyle, Ruskin, Arnold, Browning, Tennyson, Rossetti, Swinburne, and Morris. Restricted course. Professor Parrott.

407, 408. Advanced Composition. For specially qualified students. The course will be conducted in groups, and the individual student will be expected to practise composition in the particular form best suited to his powers and needs. Such forms may include the Essay, Narrative, Dramatic Writing, and Verse. Restricted course. Professor Shellabarger. [Not given, 1921-1922.]

*410. (Classics 426.) English Literature and the Classics. The quality of English Literature as variously determined by the influence of the Classics; the spirit of the Classics as manifest in the form and content of English Literature. Readings in some ten or fifteen authors, ancient and modern. If this is elected as an English course, the ancient authors will be read in the best English versions. Restricted course. Professor Osgood.

*412. English Poetry of the Nineteenth Century. A study of some of the leading British and American poets.

* Also listed as a graduate course.

Unrestricted course. Professor van Dyke and preceptors.

NOTE.—*A student may be admitted to restricted courses in the Department if he has maintained a standing of third group or better in the last year of college English that he has taken.*

For graduate courses in English, see Part IX of this Catalogue.

V. DEPARTMENT OF ART AND ARCHAEOLOGY

PROFESSORS MARQUAND (CHAIRMAN), BUTLER, MATHER, MOREY, ELDERKIN, SMITH, MORGAN, AND PARK; MR. POTTER, MR. SHEAR AND MR. FRIEND

301 *f*. Ancient Art. A general outline of the history of ancient sculpture, painting, and the minor arts. Lectures and required reading. Lecturer, Professor Elderkin; Preceptors, Professors Elderkin and Morey, and Mr. Friend.

302 *f*. Mediaeval Art. A general outline of the history of Early Christian, Byzantine, Romanesque, and Gothic sculpture, painting, and the minor arts. Lecturer, Professor Morey; Preceptors, Professors Morey and Smith and Mr. Friend.

303 *f*. Ancient Architecture. A course in the history of Egyptian, Assyrian, Persian, Greek, and Roman architecture. Junior course, open to approved sophomores. Prerequisite to course 405, 406. Lecturer, Professor Butler; Preceptors, Professors Butler and Smith and Mr. Friend.

304 *f*. Mediaeval Architecture. The history of Early Christian, Byzantine, Romanesque and Gothic architecture. Junior course, open to approved sophomores. Prerequisite course, Ancient Architecture 303. Lecturer, Professor Butler; Preceptors, Professors Butler and Smith, and Mr. Friend.

305. Elements of Architecture. The orders, moldings, masonry, walls, arches, doors, windows, stairs, pediments, ceilings, roofs, vaults, domes, etc. Lectures and draughting-room periods. Professor Morgan.

306. Shades, Shadows and Rendering. Short and direct

f—Free elective.

methods for determining shades and shadows on architectural features, with applications by wash rendering in India ink and monotone. Prerequisite course: Elements of Architecture 305. Lectures and draughting-room periods. Professor Morgan.

308. Architectural Drawing. Practical training in the use of draughting instruments, in lettering and in drawing in pencil, pen and ink. Instruction will consist of the criticism of the work done in the classroom under the personal supervision of the instructor. Professor Park.

*401. Renaissance and Modern Sculpture. A general treatment of sculpture from the end of the Middle Ages to modern times. Prerequisite: one of the junior courses in Art and Archaeology. Lecturer, Professor Morey; Preceptors, Professors Morey and Smith.

*402. Greek Sculpture. A study of the technique, forms, composition and development of Greek sculpture. Lectures and required reading. Prerequisite course, Ancient Sculpture 301. Lecturer and Preceptor, Professor Elderkin.

*403 *f*. The Revival of Painting in Italy. An outline of the history of painting in Italy from Cavallini to Michelangelo, with special regard to the Florentine School. Lecturer, Professor Mather; Preceptors, Professors Mather and Smith.

*404 *f*. Modern Painting. The theory and development of Modern Painting will be traced, chiefly in France and England, from its precursors in the 17th century, to the year 1900. Artistic movements will be related to their cognate tendencies in literature and politics. Especial attention will be given to the growth of romanticism in painting with its sequels in realism and impressionism. Lecturer, Professor Smith; Preceptors, Professor Smith and Mr. Friend.

*405, 406. Classical Architecture. The detailed study of the architecture of the Greeks and Romans in its historical development in antiquity and the Renaissance. Colonial, Neo-classic, and modern architecture. Open to approved juniors. Prerequisite course Ancient Architecture 303. Lectures and reading. Professor Butler.

f—Free elective.

* Also listed, with additional work, as a graduate course.

†407. Perspective and Indication. The science of drawing in perspective, and its application to architectural presentation by the shortest and most direct methods, including the pictorial treatment of the finished drawing. Prerequisite courses 305, 306. Lectures and drawing periods. Professor Morgan.

408. Applied Elements. The theory of architectural design and the application of Classic architectural principles to the solution of problems in design suitable to beginners. Prerequisite courses 305, 306 and 407. Lectures and drawing periods. Professor Morgan.

409, 410. Freehand Drawing. The first term is devoted to drawing in charcoal from the cast, with especial attention to architectural subjects; and the second to water-color work. Open to approved students only. Prerequisite courses, 305, 306, 308. Professor Park.

NOTE.—*Drawing courses are not regarded by the Department as prerequisites, except for drawing courses, nor are they counted as departmental courses.*

SCHEDULE OF UNDERGRADUATE COURSES FOR THOSE ELECTING THE DEPARTMENT OF ART AND ARCHAEOLOGY

SOPHOMORE YEAR

First Term	*Second Term*
303. Ancient Architecture.	304. Mediaeval Architecture.

JUNIOR YEAR

301. Ancient Art.	302. Mediaeval Art.
405. Classical Architecture.	406. Renaissance Architecture.

SENIOR YEAR

401. Renaissance and Modern Sculpture.	402. Greek Sculpture.
403. Italian Painting.	404. Modern Painting.

Departmental students are strongly advised to elect literary and historical courses covering the periods they are studying in art.

For graduate courses in Art and Archaeology, see Part IX

† Does not count as one of the two courses required of departmental students.

of this Catalogue. For graduate courses in Architecture, see under the School of Architecture, Part IX of this Catalogue.

The Department of Art and Archaeology has extended its courses in Architecture so that Princeton students desiring to enter the architectural profession, by beginning as approved sophomores their study of the history of Architecture, and continuing their studies in the Art Department during junior and senior years, can in two years of graduate work at Princeton complete the work covered in the greater architectural schools and qualify for the degree of Master of Fine Arts in Architecture. A summary of the required subjects for this course in Architecture is printed below. The courses listed therein, which have not already been described among the undergraduate courses, will be found under the School of Architecture.

SCHEDULES OF UNDERGRADUATE AND GRADUATE COURSES REQUIRED BY THE SCHOOL OF ARCHITECTURE

1. For a student enrolled in Princeton University as a candidate for the degree of A.B. on graduation, and the degree of M.F.A. in Architecture after two years of graduate work.

The numbers preceding the titles of courses refer to the descriptions already listed.

SOPHOMORE YEAR

First Term	*Second Term*
303. Ancient Architecture	304. Mediaeval Architecture
201b. (C.E.) Descriptive Geometry	308. Architectural Drawing
Three electives	Three electives

(Recommended electives—English, French, and Mathematics)

JUNIOR YEAR

405. Classical Architecture	406. Renaissance and Modern Architecture
305. Elements of Architecture	306. Shades, Shadows and Rendering
301. Ancient Art	302. Mediaeval Art
Two electives	Two electives

(Recommended electives—Economics and History)

SENIOR YEAR

407. Perspective and Indication	408. Applied Elements
409. Freehand Drawing (Charcoal)	410. Freehand Drawing (Watercolor)
403. Italian Painting	404. Modern Painting
401. Renaissance Sculpture	402. Greek Sculpture
One elective	One elective

(Recommended electives—Modern Language or History)

1ST GRADUATE YEAR

NOTE.—*The figures following the titles of courses in the graduate years indicate the minimum number of hours per week that the student is expected to devote to the course, including lectures, recitations, drawing and study, and will, of course, vary somewhat according to the individual.*

501.	Elementary Design	24	502.	Intermediate Design	24
505.	Freehand Drawing	8	506.	Freehand Drawing	8
509.	Ornament and Decoration	4	510.	Ornament and Decoration	4
515.	Building Materials	4	516.	Building Materials	4
517.	Structural Design	4	518.	Structural Design	4
519.	Development of Styles	2	520.	Development of Styles	2
		46			46

2ND GRADUATE YEAR

503.	Advanced Design	30	504.	Advanced Design and Thesis	32
511.	Ornament and Decoration	4	512.	Design of Ornament	8
513.	Mechanical Equipment of Buildings	4	514.	Contracts and Specifications	4
507.	Freehand Drawing	6	522.	Development of Styles	3
521.	Development of Styles	3			47
		47			

2. For a student enrolled in Princeton University who has not begun the study of architecture in sophomore year, and who wishes to obtain the degree of A.B. on graduation, and the degree of M.F.A. in Architecture after two years' graduate work.

JUNIOR YEAR

303. Ancient Architecture	304. Mediaeval Architecture
305. Elements of Architecture	306. Shades, Shadows and Rendering
301. Ancient Art	302. Mediaeval Art
201. (C.E.) Descriptive Geometry	308. Architectural Drawing
One elective	One elective

SENIOR YEAR

405. Classical Architecture	406. Renaissance and Modern Architecture
407. Perspective and Indication	
403. Italian Painting	408. Applied Elements
401. Renaissance Sculpture	404. Modern Painting
409. Freehand Drawing (Charcoal)	402. Greek Sculpture
	410. Freehand Drawing (Watercolor)

The two graduate years are the same as in Schedule 1.

3. For a student without previous study in architecture, entering the School of Architecture as a candidate for the degree of Master of Fine Arts in Architecture. This schedule requires the strictest application, and the average student will need three years and a half to complete the work, unless he receives credit for several courses at entrance.

1ST GRADUATE YEAR

301.	Ancient Art	5	302.	Mediaeval Art	5
303.	Ancient Architecture	5	304.	Mediaeval Architecture	5
305.	Elements of Architecture	16	306.	Applied Elements	20
407.	Perspective and Indication	8	408.	Shades, Shadows and Rendering	8
409.	Freehand Drawing (Charcoal)	6	410.	Freehand Drawing (Watercolor)	8
515.	Building Materials	5	516.	Building Materials	5
201b	(C.E.) Descriptive Geometry	6			51
		51			

2ND GRADUATE YEAR

501.	Elementary Design	24	502.	Intermediate Design	24
505.	Freehand Drawing	6	506.	Freehand Drawing	6
509.	Ornament and Decoration	4	510.	Ornament and Decoration	4
517.	Structural Design	5	518.	Structural Design	5
519.	Development of Styles	2	520.	Development of Styles	2
401.	Renaissance Sculpture	5	402.	Greek Sculpture	5
405.	Classical Architecture	5	406.	Renaissance and Modern Architecture	5
		51			51

3RD GRADUATE YEAR

503.	Advanced Design	30	504.	Advanced Design and Thesis	32
507.	Freehand Drawing	6	512.	Design of Ornament	8
511.	Ornament and Decoration	4	514.	Contracts and Specifications	4
513.	Mechanical Equipment of Buildings	4	522.	Development of Styles	3
521.	Development of Styles	3	404.	Renaissance and Modern Painting	5
403.	Italian Painting	5			52
		52			

II—DIVISION OF HISTORY AND POLITICS, AND ECONOMICS AND SOCIAL INSTITUTIONS

VI. DEPARTMENT OF HISTORY AND POLITICS

PROFESSORS †PAUL VAN DYKE, †WESTCOTT, FORD, MCELROY, CORWIN, ABBOTT, MUNRO (CHAIRMAN), ‡BROWN, MYERS, **SHIPMAN, WERTENBAKER, C. R. HALL, W. P. HALL, GREEN, CARPENTER, AND MORSE; MR. HOWE, MR. VOORHEES, MR. COLT, MR. STEPHENSON, MR. BONNER, AND MR. STONE

101, 102. An Historical Introduction to Politics and Economics. Professor Green.

201, 202. Modern History from the eighteenth century to the present. Professor W. P. Hall.

301, 302. History of the United States. Professor McElroy.

303, 304 (R). Mediaeval History. Professor Munro.

305, 306. Constitutional Government; with especial reference to the political institutions of England, France, Switzerland, and the United States. Professor Myers.

307. Constitutional Interpretation. A study of the development of the Constitution of the United States through judicial interpretation. Professor Corwin.

308. Jurisprudence. A study of important legal ideas and institutions from both the analytical and the historical points of view. Professor Corwin.

309. Greek History. Professor Prentice.

310. Roman History. Professor A. C. Johnson.

*401, 402 (R). Constitutional History of England. The origin and development of English government. This course is particularly important for those who intend to study law. Professor Shipman.

*403 (R). History of the American Colonies. Professor Wertenbaker.

*404 (R). American Democracy since the Civil War. A historical study of progress toward the realization of American national ideals. Prerequisite: History 301, 302, or consent of instructor. Professor C. R. Hall.

---

* Also listed as a graduate course.
† Absent on leave.
‡ Absent on leave, First Term.
** Absent on leave, Second Term.

*405, 406. Local Government in the United States and other countries, with especial reference to municipal functions in relation to social welfare. Professor Ford.
407. Diplomatic History. Professor Brown and Mr. Howe.
408. International Law. A study of the principles of the law of Nations. Professors Brown and Mr. Howe.
409. The Renascence. Mr. Stephenson.
410. The Reformation. Mr. Stephenson.
*412. Modern Political Theories. Professor Carpenter.
414. Military History. Open only to seniors in the F. A. R. O. T. C. Professor Wertenbaker.
*421. Roman Law. Professor Carpenter.

REQUIRED COURSE FOR DEPARTMENTAL STUDENTS

Students in the Department of History and Politics shall take, before senior year, one of the following courses: History 101, 102; Economics 201, 202; Economics 301, 302.

For graduate courses in History and Politics, see Part IX of this Catalogue.

VII. DEPARTMENT OF ECONOMICS AND SOCIAL INSTITUTIONS

PROFESSORS FETTER (CHAIRMAN), †KEMMERER, MCCLELLAN, MCCABE, DIXON, HOWARD, AND GRAHAM; MR. JOHNSON, MR. HARRIS, MR. BROWN, MR. FLETCHER, MR. LUCAS, MR. BENNETT

201. Historical Economics. A study of the main lines of English and American industrial development. Especial attention to critical periods which best illustrate economic principles. Not open to students who have taken or are taking 301. Professor McCabe, Mr. Harris, and Mr. Fletcher.
202. Descriptive Economics. A descriptive study of present day economic organization. Not open to students who have taken 301. Professor McCabe, Mr. Harris and Mr. Fletcher.

---

* Also listed as a graduate course.
† Absent on leave, Second Term.

301. Elements of Economics. The fundamental principles of economics. Prerequisite to Economics 302 (may accompany 307), 306, 307 or 308, 401, 402, 403, 405, 406, 407 and 408. Not open to those who have had 202. Mainly recitations, text book and exercises. Professors Fetter and Graham, Mr. Brown, Mr. Lucas.

302. Economic problems. Continuation of course 301, showing special applications of the principles. The chief practical problems discussed are money in its relation to prices; purpose and operation of banks; insurance; the tariff; principles and practice of taxation; trade unions; labor legislation; immigration; agricultural economics; railroad transportation; control of trusts; socialism. Gives the student not intending to specialize in economics some survey of the general field of economics and is helpful to students intending to elect economics in senior year, but is not a prerequisite.

303. Elements of Economics. In substance and scope the same as 301, but different and additional readings, exercises and examinations may be given. Open only to those who have had 202. Meets the requirement of 301 as a prerequisite to other courses in the department. Professor Fetter, Mr. Johnson and Mr. Harris.

304. Economic Problems. In substance and scope the same as 302. Open only to those who have had 303.

307. Elements of Accounting. The theory of debits and credits, the organization of accounting records, and the construction of balance sheets and profit and loss statements. Three meetings a week: one lecture, one recitation, and one (two hour) laboratory period. Economics 301 (or 303) must precede or accompany this course. Professor Howard, Mr. Fletcher and Mr. Lucas.

308. Principles of Accounting. A continuation of course 307. Special features of corporation accounting; financial and profit and loss statements of corporations; valuation of special assets and liabilities; factors of depreciation, methods of calculating depreciation charges and reserves; the elements of corporate proprietorship; distribution of proprietorship gains; the nature of reserves and funds; the elements of industrial cost accounting; and the elements of income and excess profits tax ac-

counting. Two lectures and one (two hour) laboratory period. Prerequisite courses: Economics 301 (or 303) and 307. Professor Howard, Mr. Fletcher and Mr. Bennett.

306. Statistics. Statistical methods and their application. The methods of collection, presentation, analysis and interpretation of numerical data based on mass phenomena. The aim will be to improve the student's ability to make intelligent use of economic and business data. In so far as possible the treatment will require only elementary mathematical training. Prerequisite, 301 (or 303).

*401. Money and Banking. The fundamental principles of money, credit, and banking, and their exemplification in modern currency and banking history, particularly that of the United States. Considerable attention is given to present day conditions and problems. Two lectures and one conference weekly. Prerequisite, 301 (or 303). Professors Kemmerer and Graham.

*402. Public Finance. Government expenditures and revenues, public debts and financial administration; taxation; the principles of equity in the distribution of tax burdens and the principles of the shifting and incidence of taxation; the leading types of taxes such as tariff duties, excise taxes, income taxes, inheritance taxes and property taxes. Two lectures and one conference weekly. Prerequisite, 301 (or 303). Professor Graham.

*403. European Economic Policy in the Nineteenth and Twentieth Centuries. An account of some of the important events in Europe since 1815, in connection with social conditions and industrial changes. Two lectures and one conference weekly. Prerequisite, 301 (or 303). Professor McClellan.

*405. Labor Problems. Labor organizations and labor legislation: history of the labor movement in England and the United States; distribution of the membership in trade unions; the American Federation of Labor; structure of the various types of American unions; union policies; employers' associations; joint trade agreements, their extent and results, with analysis of the

* Also listed as a graduate course.

conditions required for successful collective bargaining; plant organizations; revolutionary labor organizations. The latter part of the term will be devoted to general topics such as protective legislation, minimum wage laws, compensation for accidents and diseases, unemployment, old age and invalidity insurance, labor disputes, governmental mediation, investigation and arbitration. Two lectures and one conference weekly. Prerequisite, 301 or 303. Professor McCabe and Mr. Johnson.

*406. Social Economics. A study of some of the influences affecting the welfare of the people, particularly poverty and criminality, and their social, economic and biological sources. Class visits to institutions, involving personal expenses, and special visits and reports are required. Two lectures and one conference weekly; five visits to institutions. Prerequisite, 301. Professor Fetter.

*407. Corporation Finance. The development, legal characteristics and financial relationships of corporations; corporate securities; capitalization and valuation; promotion and underwriting; receivership and reorganization; problems of corporate management; anti-trust legislation. Prerequisite, 301. An elementary knowledge of accounting is essential. Students are therefore urged to elect 307 along with 301. Professors Dixon and Howard, and Mr. Brown.

*408. Economics of Transportation. History and present status of transportation and communication including rail, water and highway transport; theories of rate making; problems of coöperation and combination including intercorporate relationships; public regulation both federal and state; government operation of railways during the European War and the problem of the future, including a consideration of government ownership as a permanent solution. Two lectures and one conference weekly. Prerequisite, 301. Professors Dixon and Howard.

For graduate courses in Economics and Social Institutions see Part IX of this Catalogue.

---

* Also listed as a graduate course.

III. DIVISION OF MATHEMATICS AND SCIENCE

VIII. DEPARTMENT OF MATHEMATICS

DEAN FINE (CHAIRMAN), PROFESSORS †THOMPSON, EISENHART, VEBLEN, GILLESPIE, MACINNES, WEDDERBURN, AND ALEXANDER; MR. CLELAND, MR. RAYNOR, MR. FRANKLIN AND MR. MACDUFFEE

101, 102. Plane Trigonometry, Algebra and Co-ordinate Geometry. Freshman course, open to students who have not offered trigonometry for entrance.

103, 104. Algebra, Co-ordinate Geometry, Calculus, and Spherical Trigonometry. Required of all C.E. Freshmen. Professor MacInnes.

109. Co-ordinate Geometry. Freshman course, open to students who have offered trigonometry for entrance.

110. Calculus. Freshman course, open to students who have taken 109.

201, 202. Calculus. Elective course, open to all sophomores who have not taken 109, 110. Professors Gillespie and Alexander.

203. Calculus and Elementary Differential Equations. Required of all C.E. sophomores. Professor MacInnes.

205, 206. Analytical Mechanics. Required of all C.E. sophomores. Professor MacInnes.

207. Calculus. Continuation of 110. Open to all sophomores who have taken 109, 110. Professors Fine and Wedderburn.

208. Differential equations. Open to all students who have completed 202 or 207. Professors Fine and Wedderburn.

209, 210. Algebra. A year's course based on Fine's *College Algebra.* Open to all students who have completed 101, 102 or 109, 110. Professor Fine.

211. Solid Analytical Geometry. Open to all students who have completed 101, 102 or 109, 110. Professor Eisenhart.

212. Homogeneous Co-ordinates. Conic sections and modern analytical geometry. Open to all students who have completed 211. Professor Eisenhart.

303, 304. Projective Geometry. Foundations of Euclidean

† Absent on leave.

Geometry. Geometry of the Special Theory of Relativity, non-Euclidean Geometry. Synthetic Geometry of Conic sections. Prerequisite 101-102 or 109-110. Junior course, open to seniors. Professor Veblen.

307, 308. Elementary theory of Real Variables. The more important functions of analysis; infinite series: practical applications on the approximation of functions, interpolation and numerical integration. Open to students who have completed 202 or 207. Professor Alexander.

309, 310. Analytical Mechanics. Introductory course. Junior course, open to students who have completed 202 or 207. Professor Gillespie.

*401, 402. Functions of a complex variable. Introductory course. Professor Fine.

For graduate courses in Mathematics, see Part IX of this Catalogue.

IX. DEPARTMENT OF PHYSICS

DEAN MAGIE (CHAIRMAN), PROFESSOR LOOMIS, DEAN MCCLENAHAN, PROFESSORS TROWBRIDGE, ADAMS, COOKE, AND COMPTON, MR. ROBERTS, MR. MUNDT, MR. COLLINS, MR. ZAHN, MR. KENNEDY, AND MR. PURDY

101, 102. General Physics. General course in physics, including laboratory work. For freshmen who have not passed Physics for entrance. Both terms, 4 hours a week. For this course a fee of $5 is charged and a deposit on apparatus of $5 is required. Professor McClenahan.

103, 104. General Physics. Advanced freshman course, for all freshmen who passed Physics for entrance with a satisfactory school record in laboratory work. Professor Trowbridge.

201, 202. General Physics. General course in physics, including laboratory work. Sophomore course, for sophomores who did not take the corresponding course in freshman year (Physics 101, 102.) Both terms, 4 hours a week. For this course a fee of $5 is charged, and a deposit on apparatus of $5 is required. Professor McClenahan.

* Also listed as a graduate course.

203, 204. Wave Motion, Sound and Light. Sophomore course open to students who have taken either Physics 101, 102, or Physics 103, 104 in freshman year. Professor W. F. Magie.

205, 206. Heat, and Electricity and Magnetism. Required of all C.E. sophomores. Professor Loomis.

301, 302. Experimental Physics. Lectures and laboratory work. Professor Loomis.

303. Properties of Matter. Professor Compton.

304. Heat. Professor W. F. Magie.

309, 310. (Mathematics 309, 310.) Analytical Mechanics. Introductory course. Professor Gillespie.

401, 402. Advanced Experimental Physics. Professor Cooke.

403, 404. Theoretical Physics: Electricity and Magnetism. Prerequisite course: The Elements of the Calculus. Professor Cooke.

Honors Courses in Physics

The Department of Physics offers, in conjunction with the Department of Mathematics, the following courses, from which are to be chosen the courses taken by candidates for Special Honors in Physics:

309, 310. Analytical Mechanics. Professor Gillespie.

311, 312. Physical Optics. Professor Trowbridge.

313, 314. Experimental Physics. Experiments in mechanics, properties of matter, sound, heat, and light. Professor Loomis.

*411, 412. Theory of Electricity and Magnetism. Professor Adams.

*413. Thermodynamics. Professor W. F. Magie.

*414. The Electron Theory. Professor Compton.

*415, 416. Experimental Physics. Experiments in electricity and magnetism. Professor Cooke.

Honors Courses in Mathematics and Physics

The Departments of Mathematics, Physics and Astronomy offer courses which, taken in proper combination and pursued so that the standards required of candidates for Honors in these several Departments are attained, will lead to Special Honors in Mathematics and Physics.

In junior year the candidate takes either two courses in Mathematics and one of the Honors courses in Physics, or one course in Mathematics and two of the Honors courses in Physics. In the courses which he takes he must maintain the standards set for Honors students in the Departments concerned. In senior year a candidate again takes courses in Mathematics and Physics, according to the same plan; two courses in one Department and one in the other, the course or courses taken in Physics being selected from the Honors courses of that Department. He may take instead of any one of these three courses, the course *401, *402, Celestial Mechanics, offered by the Department of Astronomy.

For graduate courses in Physics see Part IX of this Catalogue.

X. DEPARTMENT OF ASTRONOMY

PROFESSORS RUSSELL (CHAIRMAN), DUGAN AND STEWART

301. Introduction to Astronomy. The Solar System. A summary of our present knowledge of the earth, moon, sun, planets, comets and meteors, and of the methods by which this knowledge has been attained and is applied in navigation and other practical problems. Lectures, with occasional written tests. Professor Russell.

302. Elementary Practical Astronomy. Constellation study. Construction and use of astronomical instruments. Observations with sextant, theodolite, transit, equatorial, etc. A brief course in navigation is included. Astronomy 301 or an equivalent knowledge of General Astronomy is prerequisite. Lectures three hours a week, and observation by appointment. Professors Dugan and Stewart.

*401, 402. Honors course in Celestial Mechanics. Elliptic motion; determination of orbits; disturbed motion; tidal evolution. Professors Russell and Dugan.

*403. Stellar Astronomy. A review of the present state of knowledge concerning the stars. Stellar positions, proper-motions, radial velocities, and parallaxes; group and stream motions: visual, spectroscopic and eclipsing binaries; stellar spectra, colors, and temperatures, variable and new stars; masses and densities of the stars;

characteristics of different spectral types: distribution of the stars in space; clusters and nebulae; theories of stellar evolution. Lectures. Professor Russell.

404. Practical Astronomy. Observations of Sun and Stars with equatorial, spectroscope, photometer, etc., and discussion of methods and results. Professors Dugan and Stewart.

For graduate courses in Astronomy, see Part IX of this Catalogue.

XI. DEPARTMENT OF CHEMISTRY

PROFESSORS MCCAY, NEHER, HULETT, FOSTER, MENZIES, JONES (CHAIRMAN), TAYLOR, SMITH, FURMAN, AND FLEECE; DR. DOUGHERTY, DR. SMYTH, MR. BEISLER, MR. CLARK, MR. GRAY, MR. BEEKLEY, MR. HOWARD, MR. GORTATOWSKY, MR. MAYNARD, MR. MCDAVID, MR. POWERS, MR. WEBB, AND MR. WHALEN

NOTE.—*No student will be allowed to take simultaneously more than two courses involving laboratory work.*

101, 102. Beginners' General Chemistry. Experimental lectures on the elements and their compounds, supplemented by laboratory work. Three lectures or recitations, and one laboratory exercise of 3 hours each week. The laboratory work is in part introductory to qualitative analysis. Freshman course, elective for B.S., alternative to Physics 101, 102. Both terms, 4 hours a week. Professors Foster and Fleece, assisted by Dr. Smyth, Mr. Clark, Mr. Beisler, Mr. Gray, Mr. Beekley, Mr. Gortatowsky, Mr. Howard, Mr. McDavid, Mr. Maynard, Mr. Powers, Mr. Webb, and Mr. Whalen.

103, 104. General Chemistry. Advanced course for freshmen. Experimental lectures and recitations on the elements and their compounds and on the fundamental laws and theories of Chemistry, supplemented by laboratory work. Three lectures or recitations and one laboratory exercise of 3 hourse each week. The laboratory work is in part introductory to qualitative analysis. Freshman course, elective for B.S., alternative to Physics 101, 102. Both terms, 4 hours a week. Subject to the

approval of the instructor in charge, this course is open to those students who have passed in Chemistry for admission, and is required of those electing General Chemistry, who have passed Chemistry for admission with a grade of 75 per cent or over. Professor Foster, Dr. Smyth and assistants.

†201, 202. Beginners' General Chemistry. Experimental lectures on the elements and their compounds, supplemented by laboratory work. Three lectures or recitations, and one laboratory exercise of 3 hours each week. The laboratory work is in part introductory to qualitative analysis. Sophomore elective, both terms, 4 hours a week. Professors Foster and Fleece; Dr. Smyth, and assistants.

203, (301). Qualitative Analysis. The course involves about 9 hours of laboratory work, besides a classroom exercise, each week. Sophomore or junior course, first term, 4 hours a week. Prerequisite course: General Chemistry. Required in the Department of Chemistry. Professor Smith, assisted by Mr. Gray.

204, (302). Quantitative Analysis, Part I. The Theory and practice of typical gravimetric and volumetric analyses, chiefly the analyses of simple salts. The course involves about 9 hours of laboratory work, in addition to one or more class exercises, each week. Sophomore or junior course, second term, 4 hours a week. Prerequisite courses: General Chemistry and Qualitative Analysis. Prerequisite to the later courses in Quantitative Analysis. Required in the Department of Chemistry. Professors McCay and Furman.

303. Organic Chemistry, Part I. Introductory course devoted mainly to the study of the simpler saturated and unsaturated open chain hydrocarbons, alcohols, aldehydes, ketones, and acids, together with their more important immediate derivatives and homologues. Lectures, recitations, and 66 hours (22 exercises) of laboratory work. Junior or senior course, first term, 4 hours a week. Required in the Department of Chemistry. Dr. Dougherty, assisted by Mr. Beisler.

† Courses 101, 102 or 103, 104 or 201, 202 are prerequisite to all later courses in Chemistry and Mineralogy, and to the Department of Chemistry, Biology and Geology.

304. Organic Chemistry, Part II. Continuation of Part I, including aliphatic compounds of multiple and mixed function, especially the hydroxy-acids and the dibasic acids with their derivatives, and an introduction to stereochemistry; the carbohydrates and the uric acid group in outline; the simpler cyclic compounds, benzene and its derivatives, aromatic nitrogen compounds, phenols, quinones, dyes, etc. Lectures, recitations, and 54 hours (18 exercises) of laboratory work. Junior or senior course, second term, 4 hours a week. Required in the Department of Chemistry. Professor Neher, assisted by Dr. Dougherty.

305. Physical Chemistry, Part I. Two lectures and two laboratory periods. Molecular theory and molecular weight determinations by standard methods. Junior and senior course, first term, 4 hours a week. Required in the Department of Chemistry. Professor Taylor.

306. Physical Chemistry, Part II. Twe lectures and two laboratory periods. Theory of solutions, solubilities, determination of solubilities, conductivity, etc. Junior and senior course, second term 4 hours a week. Required in the Department of Chemistry. Professor Taylor.

307. Quantitative Analysis, Part II. Continuation of Part I, including salts, minerals, and alloys. This course involves about 9 hours of laboratory work, in addition to one or more class exercises each week. Junior and senior course, first term. Prerequisite courses: General Chemistry, Qualitative Analysis, Quantitative Analysis I. Prerequisite to Quantitative Analysis III. Required in the Department of Chemistry. Professors McCay and Furman.

308. Quantitative Analysis, Part III. Systematic volumetric analysis. This course involves about 9 hours of laboratory work, in addition to one or more class exercises, each week. Junior and senior course, second term. Prerequisite course: General Chemistry. Qualitative Analysis, Quantitative Analysis I and II. Professors McCay and Furman.

309. Rise and Development of Chemical Theories, Part I. Chiefly inorganic. A history of the most important chemical theories from the period of the doctrine of

phlogiston down to the end of the 19th century. Junior or senior course, first term. Lectures and written recitations. Prerequisite: Quantitative Analysis, Part I (204). Professor McCay.

310. Rise and Development of Chemical Theories, Part II. Continuation of Part I, with especial reference to valence, the problems of isomerism and theories of structure and configuration, particularly as applied to carbon compounds, ending in the last 15 meetings with the modern study of the atom. Lectures and written recitations. Prerequisites: As under 309 with the addition of 303 (Organic Chemistry, Part I). Professors Neher and Menzies.

312. Qualitative Analysis. Junior course, second term, two class exercises and two laboratory periods of three hours each per week, 4 hours. Prerequisite, General Chemistry. Required in the Department of Biology. The course is also open, subject to the approval of the instructor in charge, to seniors and sophomores who have satisfactorily met the prerequisite requirements. (Discontinued after 1921-1922). Professor Smith, assisted by Mr. Gray.

401, 402 (307, 308). Quantitative Analysis, Parts II and III. For description, see 307, 308.

*403. Advanced Quantitative Analysis, Part IV. This course requires about 9 hours of laboratory work, in addition to one or more class exercises, each week. Prerequisite courses: General Chemistry, Qualitative Analysis, Quantitative Analysis, Parts I, II and III. Professors McCay and Furman.

*404. Metallography. The metals and their alloys; structure, constitution and properties; methods of investigation. Lectures and laboratory work. Professor D. P. Smith.

*405. Organic Chemistry, Part III. Devoted to a more detailed study of special subjects and theories; malonic ester and acetoacetic ester; carbohydrates; amino-acids and polypeptides; urea, ureides, and purines; benzene theory; dyes and color theory, etc. Lectures and recitations. Prerequisites: Parts I and II or equivalents. Professor Neher.

* Also listed as a graduate course.

*406. Organic Chemistry, Part IV. A laboratory course. This course will include the preparation of organic substances, chiefly aromatic and heterocyclic in character. Prerequisites: Organic Chemistry Parts I and II or equivalents. Professor Jones assisted by Mr. Maynard.

*407. Physical Chemistry Part III. One lecture and two laboratory periods. Electrochemistry and Thermochemistry. Professor Hulett.

*408. Physical Chemistry Part IV. Two lectures and one laboratory period. Equilibrium and velocity of reactions. Professor Hulett.

*409, 410. Advanced Inorganic Chemistry. A more intensive study of the inorganic field than is possible in the elementary courses. In particular, especial attention will be given to the introductory study of chemical crystallography, valence, and colloids. One laboratory and two class room periods. Prerequisite, course 302. Professor Menzies.

*411, 412. Chemistry in its Relation to Industry. Lectures and reading. First term: Fundamental chemical industries, including fuels, acids, alkalies and salts will be considered from the energy, engineering and economic standpoint. Prerequisite Courses, 203 (301) and 204 (302). Professor Taylor. Second term: A discussion of important chapters of Organic Chemistry, with especial reference to their bearing upon the problems of industry. Prerequisite courses, 303 and 304. Professor Jones.

For graduate courses in Chemistry, see Part IX of this Catalogue.

XII. DEPARTMENT OF BIOLOGY

PROFESSORS SCOTT, RANKIN, MCCLURE, CONKLIN (CHAIRMAN), DAHLGREN, SHULL, HARVEY, FARR, AND CARY; DR. PATON, DR. MAYOR; MR. ROGERS, MR. MACY, AND MR. SILVESTER

201, 202. General Biology. Lectures, laboratory work, and recitations. An introduction to the fundamental

* Also listed as a graduate course.

properties of living things, their functions, structures, classification, habits, life-histories, and evolution. Freshman elective for students who have had chemistry in preparatory school; sophomore elective for students in all courses who have had General Chemistry 103, 104, or its equivalent. Prerequisite to all the subsequent courses in Biology, except Botany 303, 304. Professors Conklin and Cary, assisted by Professor Rankin and Mr. Silvester.

301, 302. Botany. Practical work in the field and laboratory, lectures and recitations. An introduction to the general principles of plant life. Professor Rankin.

303. Comparative Osteology. Ontogeny and comparative structure of the skeletons of the different classes of vertebrates. Exercises in descriptive work. Each student must prepare a thesis on a skeleton especially assigned for his study. Professor Farr.

304. Bacteriology. Lectures on the classification, morphology, life processes and etiological relations of Bacteria; laboratory work on selected types of air, soil, water and parasitic forms. Professor Dahlgren.

305. Invertebrate Zoology. Lectures and laboratory work on selected phyla of invertebrates. Professor Cary.

306. Parasitology. A study of the structures, relationships and life-histories of animal parasites and their rôle in the causation and transmission of diseases of man and the higher animals. Lectures, recitations and laboratory work.

307, 308. Genetics and Eugenics. Lecture and laboratory course on phenomena of development, heredity, variation, and experimental evolution, and their relations to plant and animal improvement, eugenics, sociology, and medicine. Sophomore and junior elective open to students who have had Biology 201, 202 or equivalent. Professor Shull.

*401. Comparative Anatomy of Vertebrates. Lecture and laboratory course. Lectures on the comparative anatomy of the organ systems of vertebrates, and dissection of the dog-fish and a mammal. Professor McClure.

*402. Vertebrate Embryology. Lecture and laboratory course.

---

* Also listed as a graduate course.

A comparative study of the development of vertebrates. Professor McClure.

*403. Histology. A study of protoplasm, cells, and tissues as they underlie animal and vegetable life; the histology of the fundamental tissues of support, energy production, sensation and conduction. Professor Dahlgren.

*404. Advanced Histology. The comparative histology of the tissues of reproduction, assimilation, circulation, excretion and secretion. Practice in microscopical technic. Thesis. Continuation of Histology 403. Professor Dahlgren.

*406. Vertebrate Palaeontology. Lectures and laboratory work on fossil vertebrates. Professors Scott and Farr.

*407, 408. General Physiology. Lectures and Laboratory work. An introduction in the phenomena exhibited by living matter. Professor Harvey.

*412. Biological Chemistry. A study of carbohydrates, fats, proteins, emzymes, vitamines, hormones, immune bodies and other compounds manufactured by plants and animals. Biochemical processes as well as biochemical compounds will be studied. Professor Harvey.

General Ornithology. Optional course (open to all classes) not counting toward a degree. External structure, migration, geographic distribution, importance to man, general habits, etc. Synopsis of orders and families of birds of the world, with special attention to those of the northeastern United States. Lectures and field work. Each student must have a good field glass. Mr. Rogers.

For graduate courses in Biology, see Part IX of this Catalogue.

XIII. DEPARTMENT OF GEOLOGY

PROFESSORS LIBBEY, SCOTT (CHAIRMAN), PHILLIPS, SMYTH, VAN INGEN, FARR, SINCLAIR, BUDDINGTON, HOWELL AND MR. WANLESS

201, 202. Geology. Beginners' course, covering the subject in outline. First term, Physical Geology; Second term, Geological History of the Earth. Prerequisite to

* Also listed as a graduate course.

courses 301, 403, 405, 409. Lecturer, Professor Scott; Preceptors, Professors Farr, Sinclair, Buddington, and Howell.

203. Geology. The composition and structures of rocks and mineral deposits; geological processes as related to engineering operations; geological mapping. Lectures, laboratory and field work. Required course for C.E. sophomores. Professor Buddington.

301, 302. Structural Geology. The rocks and structures of the Earth's crust; and the elements of Geological Surveying. Essentially a laboratory and field course. Field work required. Three laboratory periods of 2 hours each, or equivalent. Prerequisite: Geology 201, 202. Prerequisite to courses 403, 404, and 405, 406. Professors Sinclair and Buddington.

303, 304. Mineralogy. First term, Descriptive Mineralogy. Second term, Determinative Mineralogy, including Blowpipe Analysis. Lectures, recitations and laboratory work. Prerequisite to courses 403, 404; 407, 408. Professor Phillips.

305, 306. Evolution of Organisms and Man. The principles of Evolution and the historical development of the various types of Life upon the Earth. Open elective. Lectures and conferences. Professors Scott, van Ingen, Farr, Sinclair, and Howell.

308. Physical Geography. Morphology of the continents. Professor Libbey.

*401, 402. Introduction to Palaeontology. The principles of Palaeontology, and study of the important groups of animals and plants in their geological relations. Open elective. Lectures and conferences. Professors Scott, vanIngen, Sinclair, and Howell.

*403, 404. Petrology. A study of the composition and structural features of the rocks of the Earth. Lectures, laboratory, and field work. Prerequisites: 301, 302, Mineralogy 303, 304. Professors Smyth and Buddington.

*405, 406. Practical Geology. Designed to instruct in exact methods of securing information upon which the body of geological science is based. Lectures, 2 weeks field work, laboratory, and library work, culminating in a

* Also listed as a graduate course.

written report. Prerequisites: Geology 201, 202; 301, 302. Professors vanIngen, Buddington, and Howell.

*407, 408. Optical Mineralogy and Petrography. Lectures and laboratory work on Crystallography and on the Optical Properties of rock-forming minerals, with instruction in the general practice of Petrography. Prerequisite, Mineralogy 303, 304. Professor Phillips.

*409, 410. Economic Geology. The principles controlling the circulation of mineral matter in the earth's crust, its concentration into workable deposits, and the geological relations of typical mining regions. Lectures and laboratory work. Open only to students taking Geology 403, 404. Professors Smyth and Buddington.

SUMMER COURSE IN FIELD GEOLOGY

Sophomores and juniors who contemplate electing the major part of their studies in the Department of Geology, or who are interested in field work, are advised to consult the professors of the Department with a view to joining one of the field parties during a portion or all of the summer vacation. Such field work, satisfactorily performed and reported upon, may be presented for credit toward a degree.

Graduate students are advised to join a field party during the summer previous to their first year of residence. For more definite information address, Secretary of Department of Geology, P. O. Box 248, Princeton, New Jersey.

For Graduate courses in Geology, see Part IX of this Catalogue.

XIV. DEPARTMENT OF PSYCHOLOGY

PROFESSORS WARREN (CHAIRMAN), MCCOMAS, AND BRIGHAM; MR. ENO, DR. COTTON, DR. ZIGLER, AND MR. SCHECK

301. General Psychology. Outline of the science of psychology. Functions of brain and nervous system. Laws of human behavior and consciousness; their application to everyday life. Lectures, demonstrations, preceptorial conferences, and written analyses. Lecturer, Professor Warren; Preceptors, Professors Warren and Brigham.

* Also listed as a graduate course.

302. Social Psychology. A study of the social environment and the individual mind; instinctive and hereditary traits; types of mind and individual differences; mental and industrial tests; the application of psychological principles to social problems. Lectures and preceptorial conferences. Professor McComas.

303. Genetic Psychology. Evolution of behavior and consciousness in the lower species and man. Lectures, theses, and preceptorial conferences. Lecturer, Professor Warren; Preceptors, Professors Warren and Brigham.

304. Physiological Psychology. Psychology with especial reference to the correlation of conscious processes with the structure and functions of the sense organs and central nervous system. Lectures and laboratory work. General Psychology 301 and General Biology 201 and 202 recommended as preliminary course. Professor Brigham.

401. Advanced General and Applied Psychology. For specially qualified students. Lectures, theses and preceptorial conferences. Professor Brigham.

*402. History and Psychology of Education. This course is designed to meet the needs of students intending to teach. It presents the historical development of the educational principles and institutions which influence the present, and the applications of experimental psychology to the problems of teaching. History of Philosophy 301 and 302 recommended as preliminary course. Lectures and preceptorial work. Professor Brigham.

*403. Experimental Psychology. Introductory course. Psychophysical methods, analysis of sensation, reaction, and study of the common senses. Lectures and work in the laboratory. General Psychology 301 is recommended to be taken as preparatory to this course. Dr. Zigler, assisted by Mr. Scheck.

*404. Experimental Psychology. Continuation of 403. Special senses; space perception and illusions; higher intellectual processes. Lectures and work in the laboratory. Professor McComas, assisted by Mr. Scheck.

For graduate courses in Psychology, see Part IX of this Catalogue.

XV. DEPARTMENT OF HYGIENE AND PHYSICAL EDUCATION

PROFESSORS RAYCROFT (CHAIRMAN), TOOKER, BROWNE, AND SINCLAIR; MR. SULLIVAN, MR. NIES, AND MR. MILLER

The aim of the work in this Department, more fully described in Part VI of this Catalogue, is to promote the general health and physical efficiency of the students; and to stimulate the formation of habits of rational exercise and healthy living that will be continued after graduation. All members of the freshman class are required to take regular work as indicated below.

Personal Hygiene. Lectures and recitations. A discussion of the fundamentals of health and physical efficiency; the influence of diet, exercise, bathing and sleep; the effects of personal habits; the use of alcohol and tobacco; and a study of the more common infectious diseases—their nature, causes, methods of transmission and prevention. The lectures will be illustrated by the use of manikins, diagrams, and lantern slides. Freshman course, first term, 2 hours a week. Professors Raycroft, Tooker, Sinclair, and Browne.

Physical Examinations. Each student is given a careful physical examination which serves as a basis for advice regarding special corrective exercises, if needed, and affords an opportunity for a discussion with each individual on the various practices and habits that affect his physical and mental efficiency. This examination includes a few anatomical observations; an examination of the eyes, nose, ears, throat, heart, lungs, and kidneys; and tests of physical efficiency. Professors Raycroft, Tooker, Browne, Sinclair and Mr. Nies.

Physical Education. Required of all freshmen, both terms, 3 hours a week. Professors Tooker and Browne, Mr. Sullivan, Mr. Nies, and Mr. Miller.

A. Introductory Physical Training. This course is designed to give every student a well organized program of work to improve posture and to develop body control and alertness; elementary instruction in boxing, wrestling, and other personal contact games; group games and mass athletics, including forms of exercise that will be

useful during the college course and after graduation. The classes are conducted out of doors whenever possible. Entering students are required to take this course during one season of the four into which the freshman year is divided.

B. Elementary Swimming and Life Saving. Every student is required to pass a test in swimming and life saving immediately after his physical examination at the beginning of the year. Those who fail will be required to take elementary instruction in swimming until they are able to pass the freshman tests.

C. Highly Organized Games and Contests. Coaching and instruction are provided for classes and squads in highly organized games and contests, including boxing, wrestling, handball, volley ball, swimming, water polo, tennis, rowing, in addition to the usual intercollegiate events. Students may elect work with any of these squads during three of the four seasons in the freshman year.

Intramural Athletics for All Students. Provision is made for the organization and instruction of intramural teams in basketball, swimming, water polo, wrestling, boxing, baseball, soccer, handball, rowing, tennis, etc. Schedules are organized, officials and equipment provided, to enable teams to contest for the championship of the clubs, classes, and University, in the various branches of sports. Professors Tooker, Browne, Mr. Sullivan, Mr. Nies, and Mr. Miller.

Special Course. In teaching and administration, to qualify men as instructors or coaches in Competitive Games, Mass Athletics, Swimming and Life Saving, Mass Drill, and other forms of physical education. Elective course. Professors Raycroft, Browne, and Tooker; Mr. Sullivan and Mr. Nies.

DEPARTMENT OF CIVIL ENGINEERING

PROFESSORS CONSTANT (CHAIRMAN), WILLSON, SMITH, HARRIS AND BEGGS; MR. KISSAM AND MR. CULVER.

FRESHMAN YEAR

English 101, 102*a*. Literature and Composition. The aim of the course is to develop and train intelligent appreciation of the fundamental qualities of good literature and composition, such as imagination, clarity of thought, structure, and effective expression. This aim is accomplished by the reading and analysis of certain masterpieces of prose and verse from the later nineteenth century writers, English and American, and by the writing of frequent themes which shall express, under the stimulus of these masterpieces, the student's personal thought and observation.

Chemistry 101, 102. General Inorganic Chemistry for beginners. Experimental lectures on the elements and their compounds, supplemented by laboratory work. Two lectures, one recitation, and one laboratory exercise of 3 hours each week. Both terms, 4 hours a week. Professor Foster and others.

Chemistry 103, 104. Advanced general inorganic chemistry and qualitative analysis. Experimental lectures, supplemented by laboratory work. Three lectures or recitations and one laboratory exercise of three hours each week. Both terms, 4 hours a week. Required of C.E. freshmen who present chemistry for entrance. C.E. freshmen not prepared for this course are required to take Chemistry 101, 102, and will complete their chamistry requirement by taking Chemistry 104 in the second term of their sophomore year. Professor Foster and others.

Mathematics 103, 104. Selected topics of Algebra, Spherical Trigonometry, Coördinate Geometry and Differential Calculus. Professor MacInnes.

Engineering Drawing 101, 102. Use of instruments, lettering, line work, geometric constructions; orthographic, isometric and oblique projections; freehand dimensional sketching; assembly and working drawings; structural drawing of bridge trusses and plate girders. First

term, 3 hours a week. Second term, 2 hours a week. Mr. Culver and Mr. Kissam.

SOPHOMORE YEAR

Physics 205, 206. Heat, and Electricity and Magnetism. Lectures based on experimental demonstrations. Prerequisite: collegiate course in General Physics. Professor Loomis.

Chemistry. See Freshman Year, Chemistry 104.

Mathematics 203. Integral Calculus and Elementary Differential Equations. Professor MacInnes.

Mathematics 205, 206. Mechanics; analytical and graphical methods applied to equilibrium problems, stresses in frames, centers of gravity, moments of inertia. Kinetics of a particle and rigid body, energy and work, friction, impact. First term, 3 hours a week. Second term, 6 hours a week. Prerequisite: Calculus. Professor MacInnes.

Geology 203. The composition and structures of rocks and mineral deposits; geological processes as related to engineering operations; geological mapping. Lectures, laboratory and field work. Professor Buddington.

Surveying 201. Structure, use and adjustment of engineers' field instruments; triangulation, leveling, topographical surveying. Stadia measurements. Lectures, recitations and office work. Prerequisite: Surveying 102. Professor Harris and Mr. Kissam.

Surveying and Railway Engineering 202. Preliminary survey and location. Railway curves. Lectures, recitations, problems and calculations. Field practice in contouring, triangulation and stadia surveys. Prerequisite: Surveying 201. Professor Harris and Mr. Kissam.

Descriptive Geometry 201, 202. Fundamental problems of the point, line, and plane; elementary and higher surfaces; intersections, developments and model-making. Applications in engineering constructions. Both terms, 2 credits of 3 hours each week. Prerequisite: Freshman Mathematics. Professor Willson.

JUNIOR YEAR

Mechanics of Materials 301. This course is intended to meet the requirements of students in all engineering courses

and to prepare them, by the study of the action and effect of forces on materials, to design intelligently and economically the parts entering into any structure or machine. The course comprises a study of the strength and elastic properties of materials; simple and combined stresses; general theory of beams, including simple, cantilever, overhanging, restrained, continuous, constant strength, and compound beams, as regards both their strength and flexure; theory and design of columns according to secant, Euler's, Rankine's, and straight line formulas, and comparison of results with laboratory tests; resilence of columns, beams, shafts, and springs; impact stresses; fatigue of materials; design of shafting for power transmission; design of riveted joints; stresses in cylinders and pipes; review of moments of inertia, principal axes, etc. The solution of numerous problems from engineering practice by the individual students is required. First term, 3 recitation hours and 1 three-hour problem period a week. Professor Beggs. Prerequisite: Calculus and Mechanics.

Hydraulics 302. Elements of hydraulics, including water wheels. Laboratory measurements of the flow of water. Second term, 4 hours a week. Prerequisite: Calculus and Mechanics. Professor Smith.

Materials Laboratory 303. Testing of materials of construction in tension, compression, torsion and flexure. Cement and concrete testing. Reading and recitations on processes of manufacture. First term, 2 hours a week. Professor Smith and others.

Hydraulic Laboratory 304. Measurements of the flow of water. Second term, 1 hour a week. Professor Smith.

Kinematics 305. Graphical determination and diagrams of displacement, velocity and acceleration of the elements of mechanisms; parallel and straight line motion of mechanisms; design and layout of cams, gears and gearing. Prerequisite: Engineering Drawing, Mechanics, Analytical Geometry. First term, 2 hours a week. Mr. Culver.

Machine Design 306. Analysis of stresses and strains in machine parts; proportions of machine parts as dictated by stress; design of machine elements, including:

fastenings, springs, belting, gears and gearing, flywheels, couplings, clutches, brakes, shafting, and bearings. Prerequisite: Mechanics of Materials. Mr. Culver.

Electrical Engineering 307, 308. Applied Electricity. Methods of generation, transmission and utilization of electrical energy. Principal characteristics of direct and alternating current apparatus with regard to selection, installation, testing and operation of electrical machinery. Both terms, 3 hours a week, with laboratory work. Prerequisite: Mechanics and Physics. Professor MacLaren and others.

Thermodynamics 309. General relation of heat energy and power considered analytically and graphically; laws of gases, gas energy cycles; vapors, steam and steam tables, vapor cycles; power, efficiency and performance; action of steam in theoretical and real engines. Prerequisite: Physics, Mechanics, Integral Calculus. Mr. Culver.

Heat Power Engineering 310. Types of steam engines; governors, valves, valve gears, and valve diagrams; indicators and indicator diagrams; nozzles, turbines; fuels, combustion, furnaces, stokers, oil burners, boilers, chimneys, auxiliaries; utilization of waste heat, heat transfer, condensers, power plants. Laboratory work includes: calorimetry, use of indicators, valve setting, and tests of steam and gas engines, boilers, pumps and injectors. Prerequisite: Thermodynamics 309. Mr. Culver.

Railway Engineering 311. Railway location and construction, track problems, structures, earth work, cost computations. Prerequisite: Surveying. Professor Harris and Mr. Kissam.

Railway Engineering. Summer Field Practice. Railway survey. Complete location of a railroad, staking out for construction, calculation of quantities for estimate of cost. Office work and mapping. Three weeks of 8 hours a day, immediately preceding the opening of college in the fall. Professor Harris and Mr. Kissam.

Structures 312. Introduction to the theory and design of statically determinate beams and trusses. The principles of analytical and applied mechanics are illustrated

in the calculation of stresses and design of building frames, roof trusses, and bridges. Stresses are determined both by algebraic and by graphical methods, the latter including the Maxwell diagram, funicular polygon, and influence line. The value of the use of the influence line and equivalent loads as an aid to the derivation of algebraic formulas or to the direct calculation of stresses is emphasized. The types of bridge trusses discussed include the Pratt, Howe, Warren, and cantilever trusses, skew bridges, bridges on curved track, and three hinged arch. The theory is supplemented by many practical problems, including the complete designs of a roof truss and of a railroad plate-girder bridge. Second term, 2 recitation hours and 1 drawing room period per week. Prerequisite: Mechanics of Materials 301. Professor Beggs.

SENIOR YEAR

Economics 301. Economic Principles. A fundamental course on the treating of value, trade, price, competition, monopoly, rent, wages, interest, profits, and some of the larger questions of population, natural resources, accumulation of capital, wealth and welfare. The readings, discussions, and written exercises of various kinds are designed to train the students to an exact understanding of economic concepts and clear thinking on elementary economic problems. Professor Fetter and others.

Economics 302. Economic Problems. A broad treatment of the practical economic problems that are attracting public attention, such as the quantity of money, prices, changes in price, the banking system, relations between labor and capital, railroad legislation, government ownership, control of monopoly, and socialism. Professor Fetter and others.

English 401, 402. Theme writing and public speaking. Technical reference reading, written and oral presentation of reports upon engineering projects, argumentation, oral discussion of current topics. Both terms, 2 hours a week. [Not given in 1921-1922.]

Bridge Design 403. Continuation of Structures 312. A more

advanced study in the theory and design of framed structures. The drawing room work includes the making of a complete stress sheet for a railroad bridge of span 200 feet or more and shop drawings of typical members. Careful study is made of standard specifications and drawings. The student is made familiar with shop practice by occasional visits with instructor to steel fabrication plants and by examination of existing structures. In the latter part of the term is given an introduction to the course in Higher Structures, including the development of Castigliano's equations of work, the equations of deflection and rotation, Maxwell's reciprocal theorem, Williot diagrams, and preliminary applications of these equations and methods to practical problems in stresses and erection. First term, 2 recitation hours and 2 drawing room periods per week. Prerequisite: Structures 312. Professor Beggs.

Higher Structures 404. Advanced study of the application of the equations of work, deflection and rotation to the problems that arise in the design and erection of draw bridges, arches, continuous beams and trusses, and cantilever bridges. The suspension bridge is treated briefly. The fundamental equations are also applied to the calculation of stresses in indeterminate building frames, secondary stresses, etc., and are fully illustrated by problems arising in the design of concrete and steel structures where continuity exists. Analytical, graphical and mechanical aids to the solution of problems are advantageously employed. Second term, 2 recitation hours and 2 drawing room periods per week. Prerequisite: Bridge Design 403. Professor Beggs.

Reinforced Concrete 405. Properties of cement and concrete. Methods of reinforced concrete construction. Mechanics of reinforced concrete beams, slabs and columns. First term, 2 recitation hours and 2 drawing room periods per week. Prerequisite: Mechanics of Materials. Professor Constant.

Concrete Construction 406. Design of reinforced concrete structures such as foundations, bridges, viaducts, dams, retaining walls, towers and buildings. Second term, 2 recitation hours and 2 drawing room periods per week.

Prerequisite: Reinforced Concrete 405. Professor Constant.

Water Power 407. Collection, control and use of water for power purposes; selection of water wheels. First term. Prerequisite: Hydraulics 302. Professor Smith.

Water Supply 408. Collection, purification and distribution of public water supplies. Prerequisite: Hydraulics 302. Professor Smith.

Highway Engineering 409. History of highways, materials and methods of construction. Cost data. Professor Harris and Mr. Kissam.

Sewerage 410. Studies in the design of sewers and the treatment and disposal of sewage. Prerequisite: Hydraulics 302. Professor Smith.

Railway Economics 411. Economic principles governing the location of railways. Relation of operating expenses and probable traffic, etc. Professor Harris.

Gas Engines 412. Thermodynamics of gas engines, gas engine cycles, fuels and combustion; valves and valve gears, carburetion, ignition, governing, cooling; detailed study of various types of gasoline, gas and oil engines and their accessories; gas engine design. Laboratory tests. Prerequisite: Thermodynamics 309, Machine Design 306. Mr. Culver.

Municipal Engineering 414. Planning of towns; street pavements; city problems. Professor Harris.

COURSES NOT INCLUDED IN PRECEDING DEPARTMENTS

Graphics 201 *a*. Elementary Drafting. Especial emphasis on architectural, including structural steel, applications. Elective in sophomore and higher years. First term, one exercise a week. Taken with course 201 *b* for a three-hour credit. Professor Willson.

Graphics 201 *b*. Descriptive Geometry. The fundamental problems of the point, line and plane, with applications to developable and other surfaces, and including trihedrals. Practically applied in the solution of problems on the drawing-board and by the construction of models. Elective in sophomore and higher years. Prerequisite to course 202 *b*, first term, two periods a week. Professor Willson.

Graphics 202 *a*. Extension of 201 *a*. Second term, one exercise a week, but taken in connection with 202 *b* for a three-hour credit. Elective in sophomore and higher years. Professor Willson.

Graphics 202 *b*. Descriptive Geometry. Advanced course, with application. Elective in sophomore and higher years when 201 *b* has been taken. Two periods a week in second term. Professor Willson.

Graphics 202 *c*. Stereotomy. Applications of descriptive geometry to problems in stone cutting. Taken with 202 *b* as an alternative to 202 *a* when the equivalent of the latter has already been taken. Elective in sophomore and higher years, second term, one exercise a week. Professor Willson.

Surveying 302. A general outline of methods of surveying and their uses. Professor Harris.

Thermodynamics 309. Heat Power Engineering 310. For description, see Department of Civil Engineering. Mr. Culver.

309. Elements of Linguistic Science. The history, methods, and results of Comparative Philology, with some account of the ethnology and religions of the Indo-European peoples. The origin, life, and growth of language. Two lectures, one preceptorial conference. Junior course, open to Seniors. Professor Bender.

*401, 402. Elementary Sanskrit. Grammar, exercises and reading, with comparison of sounds and forms with the Latin, Greek and Germanic. This course is intended especially for students of the Classical and Germanic languages. Professor Robbins. [Given by Professor Bender 1921-1922.]

404. The Ethics of Christianity. A statement and philosophical examination of Christian doctrine in its application to practical life. A special study will be made of the New Testament, and, so far as time permits, of certain portions of the Fathers, as well as of some of the leading exponents of Christianity in post-Nicene times, particularly St. Francis of Assisi, Pascal, Tolstoy and Dostoyevsky. Senior course, open to Juniors. Professor Bowman.

406. Ancient Oriental Literature. Lectures and preceptorial conferences on the literature of the Egyptians, Babylonians, Assyrians and Hebrews, and on the Phoenicians, Hittites and the minor peoples of the eastern Mediterranean basin. In each case the literature will be related to the history, and an effort made to display the interesting interrelations and transmissions. Members of the course will read selections from the literature in the best modern translations, and will make brief reports from time to time. Professor Rogers.

* Also listed as a graduate course.

DEPARTMENT OF MILITARY SCIENCE

MAJOR JOHN E. MCMAHON, F.A., CAPTAIN ARTHUR C. WATERS, F.A., CAPTAIN JAMES W. ANDREWS, F.A., FIRST LIEUTENANT ROBERT J. HORR, F.A., FIRST LIEUTENANT ARTHUR E. FOX, F.A.

The Department of Military Science includes a Field Artillery Unit of the Reserve Officers Training Corps.

The primary object of the Reserve Officers Training Corps is to provide systematic military training at civil educational institutions for the purpose of qualifying selected students of such institutions as reserve officers in the military forces of the United States. It is intended to attain this object during the time that students are pursuing their general or professional studies with the least practicable interference with their civil careers, by employing methods designed to fit men physically and mentally for pursuits of peace as well as pursuits of war. It is believed that such military training will aid greatly in the development of better citizens.

EQUIPMENT

The latest Field Artillery equipment is available for instruction purposes so that a complete course in the most recent Field Artillery methods is given. The equipment consists of:

a. One battery of 3 inch guns.

b. Range finding, fire control, radio, signal and engineer equipment as prescribed for one battalion of Field Artillery.

c. One gun and caisson with limbers, sights, fuzes setters and accessories of each of the following types:

155mm gun Filloux
155mm Howitzer
75mm Field gun—American
75mm Field gun—British
75mm Field Gun—French
4.7 inch gun

d. Miscellaneous Equipment:

2 5-ton tractors
1 Dodge touring car

1 8-passanger observation car
2 Trucks, cargo
2 Trucks, ammunition
1 Repair truck
2 Motorcycles with side cars
2 Sets sectionalized projectiles
2 Browning machine guns
2 Browning automatic rifles
1 set sub-calibre tubes
1 Flash battery outfit
30 Officers field saddles

e. Animals:
70 riding horses
20 polo ponies
4 mules

A Field Artillery Detachment of enlisted men consisting of one 1st Sergeant, 1 Supply Sergeant, 1 Stable Sergeant, 1 Sergeant, 1 Horseshoer, 1 Saddler, 1 Mechanic, and 18 Privates is on duty to take care of the animals and equipment.

General Plan

The object of this course is to give all students enrolled a thorough physical training, inculcate in them respect for all lawful authority, and to teach the fundamentals of the military profession, leadership, and a special technical knowledge required to enable them to serve efficiently in the Field Artillery.

The course is an authorized elective open to all undergraduates of the University who are physically fit. Graduate students and members of the Faculty may also be enrolled.

It is planned to cover a period of four years of academic work and at least one summer camp. Any student electing this course is expected to do so with the idea that he will, unless prevented by necessity, complete it. Upon its satisfactory completion and upon being awarded a degree by the University, he will accept from the President of the United States a commission as Second Lieutenant of the Field Artillery Section of the Officers Reserve Corps.

During the academic year there will be no required drills nor military formations except those in connection with physical training. Members of the Unit will not be under mili-

tary discipline except in summer camps and during physical training.

The four years' course is divided into two parts: (1) The first two years—basic; (2) The last two years—advanced. All courses in military science are year courses, and a student can withdraw only at the end of sophomore year except under extraordinary circumstances. Candidates having completed the basic course satisfactorily may elect to complete the advanced course and will be paid by the Government during the last two years commutation of rations amounting to approximately one hundred and thirty dollars a year. A student once electing the advanced course must complete it as a prerequisite to graduation.

Summer Camps

Two summer camps will be held in connection with the course in Military Science; the attendance will be voluntary at the first and compulsory at the second.

One will be a basic camp which students may attend while they are taking the basic course.

The second will be a camp for those students who have agreed to complete the advance course and they must attend at the end of the junior year unless prevented by unforseen circumstances.

Any graduate under the age of twenty-one years at date of graduation, shall, before becoming eligible for appointment as a reserve officer, be required to attend one camp subsequent to his graduation and prior to being commissioned.

The camps will be of six weeks duration and will open within a few days after Commencement. They will be devoted to practical Field Artillery work including target practice with the 3-inch guns. Transportation from Princeton to the camp and return transportation, uniforms, equipment, subsistence and medical attendance will be furnished students attending summer camps.

All the Field Artillery organizations from the different universities will be at the camp during the summer so that ample opportunity will be given to students for athletic competition, recreation, and a chance to meet men from other universities.

Commissions

In order to receive a commission, a student in the Department of Military Science must complete the course as prescribed below and must graduate from one of the divisions of the department of instruction. This commission as a Second Lieutenant, Field Artillery Officers Reserve Corps, covers a period of five years from date of acceptance.

The Course

Students entering the Department of Military Science and Tactics must complete by the end of sophomore year: 1. A course in Freshman Mathematics. 2. A course in Freshman Physics.

Freshman Year

Military Science 101. Ordnance and Gunnery. First term, 3 hours a week. Metals used in ordnance construction, manufacture of forgings for guns, construction of modern guns, stresses and strains acting on guns. construction of the 3-inch field gun, nomenclature, assembling and disassembling its parts, fire control instruments, principles of optics applied to them, gunnery, trajectory, influences on the trajectory, calculation of firing data.

Military Science 102. Prerequisite: Military Science 101. Ordnance and Gunnery. Second term, 3 hours a week. Gunnery. Permutations, combinations, probabilities, laws of errors, application to Field Artillery firing, logarithms, slide rule, ammunition, fuzes, gun powder, explosives, effects of artillery fire, construction of the 155mm G.P.F., 155 mm Howitzer, British, French and American 75mm guns.

Physical Training. Freshmen enrolled in the Department of Military Science will be required to conform to the regulations of the University governing physical education of freshmen in general. The course will include: 1. Close order work. 2. Setting up exercises. 3. Personal contact drill. 4. Elementary wrestling. 5. Boxing. 6. Mass games and competitions. 7. Individual physical efficiency tests.

Riding. Freshmen may substitute riding for the physical training required by the Department of Physical Education during the fall and spring. Two 1½ hour periods per week.

During part of the freshman year 12 hours physical edu-

cation will be devoted to practical work on the 3-inch guns, instruction in the preparation for the examination of gunners, and work as a gun squad.

Sophomore Year

Military Science 201. Prerequisite Military Science 102. Hippology and Military Law. First term, 3 hours a week. Conformation of the horse, lameness and disease, age by the teeth, bitting, stable hygiene, shoeing, gaits; organization of Field Artillery, the organization of a light battery, military correspondence, battery records, property responsibility, military courtesy, the common law, military law, courts martial organization, evidence, procedure, articles of war, rules of land warfare, peace conferences, moot courts.

Military Science 202. Prerequisite Military Science 201. Gas Engines. Second term, 3 hours a week. The gas engine, modern types, ignition, carburetor, lubrication, valve and spark timing, cooling systems, construction of the modern car, transmissions, clutches, springs and suspension, differentials, practical work in the operation and maintenance of motor vehicles.

Physical Training. Sophomores enrolled in the Department of Military Science will take one two-hour period of equitation and horsemanship per week during both terms. The work covered during the first term will include saddling, bitting, fitting of saddles, establishing confidence in the rider, the military seat, mounted gymnastics, road marches. The work during the second term will include riding at the different gaits, jumping, posting, mounted exercises, harnessing, driving, principles of draft, exercises with battery mounted.

Those students who are active candidates for athletic teams may by the direction of the Professor of Military Science and Tactics be excused from riding during the season in which they are actually competing. Upon the termination of this particular sport they will automatically revert back to the riding classes. This also applies to the riding classes in the junior and senior years.

Junior Year

Military Science 301. Prerequisite: Military Science 202. Topography and Communication. First term, 3 hours a week. Map scales, maps, study of contours, map reading, orientation,

running a traverse, panoramic and position sketches, projections, firing charts, laying guns, elements of electricity, methods of communication, the buzzer, the telephone, the switchboard, liaison, communication lines, artillery nets.

Military Science 302. Prerequisite: Military Science 301. Artillery Firing. Second term, 3 hours a week. Calculation of firing data, application of the laws of probabilities to Field Artillery firing, laws of errors, dispersion, preparation of fire, observation of fire, conduct of fire, smoke bomb practice, subcalibre practice.

Physical Training. Students enrolled in the Department of Military Science will take one two-hour period of equitation and horsemanship per week during both terms. Instruction in polo will constitute part of the riding course. The work during the year will include mounted gymnastics and games, jumping, mounted exercises, preliminary training of the horse, cross country riding, road marches, qualification as members of the battery reconnaissance detail.

Senior Year

Military Science 401. Prerequisite: Military Science 302. Minor Tactics and Field Engineering. First term, 3 hours a week. Organization, tactics of the various arms with special relation to the use of Field Artillery, scouting, carrying information, communications, field orders, map problems involving practical use of Field Artillery, minor tactics and map manoeuvers involving the different arms of the service, field fortifications, preparation of the ground for attack and defense, entrenchments, trench equipment, artillery emplacements, camouflage, bridges and demolition, principles of military strategy.

Military Science 402. Prerequisite: Military Science 401. Military History and Policy of the United States. Second term, 3 hours a week. A critical study of our military history and a survey of the most important campaigns and battles of the United States including the late war. The results of our military policy.

Physical Training. Seniors enrolled in the Department of Military Science will take one two-hour period of riding each week throughout both terms. The course will include polo and advanced equitation and horsemanship.

DEPARTMENT OF MUSIC

ALEXANDER RUSSELL, MUS.DOC., A.G.O. *Director of Music and University Organist*

The aim of the Department of Music is to cultivate a knowledge of music among the students by means of lectures on musical subjects, recitals, and by the encouragement of student activities in music, as the Chapel Choir, the Triangle Club, the Orchestra, the Band, and the Choristers and Glee Club.

Emphasis is laid upon the development of taste and appreciation rather than upon the technical side of music. The courses offered are planned along lines of general academic training, and it is the aim of the Department to develop men who shall learn to understand and appreciate good music in the same degree that they understand and appreciate other arts.

While it is not planned to develop professional musicians, students who evidence special talent in any particular phase of music (as singers, pianists, organists, violinists, or in composition, etc.) will be provided the opportunity to pursue studies in these branches by means of special arrangements with the head of the Department.

The following extra-curriculum courses are at present open to all students without tuition fees:

1. A course of organ recitals on the Henry C. Frick organ at Procter Hall. From Thanksgiving to June, on Sundays and Saturdays announced each year. Programs covering the literature of music from ancient to modern times.

2. A course in the History and Appreciation of Music (from the standpoint of the listener) illustrated by instrumental and vocal music. From December to May, weekly, one hour. No knowledge of music necessary for entrance to this course.

3. A course in the Harmony and Theory of Music. Students taking this course will be required to pass a preliminary examination in the rudiments of music. Weekly, one hour, second term.

4. Practice in orchestral and band playing. Open to all students able to play orchestral or band instruments.

5. Practice in singing in the Chapel Choir. Number of members limited. Admission according to vacancies open, and upon preliminary trial in singing.

6. Practice in singing in the Princeton University Choristers-Glee Club, an organization open to all men who qualify in voice trials. The Choristers give each year one or more concerts of good music of a sacred or secular character in Princeton and also appear outside Princeton.

PART V

GENERAL REGULATIONS

GENERAL REGULATIONS

TERMS AND VACATIONS

THE Annual Commencement takes place on the Tuesday preceding the last Wednesday but one in June. The University opens on the Tuesday thirty-eight weeks preceding the date of the Annual Commencement.

The formal opening exercises of the next academic year (1922-1923) are expected to take place on September 26, 1922.

The academic year is divided into two terms. The Summer Vacation extends from Commencement Day to the opening of the next academic year. Recesses are taken at Christmas and Easter and at the end of the First Term.

REGULATIONS CONCERNING REGISTRATION AND THE CHOICE OF ELECTIVES

REGISTRATION

At the beginning of the academic year each undergraduate student shall report in person at the Registrar's Office before 3 p. m. on the Tuesday on which the University opens, and register his full name, home address, and Princeton address.

In every case of neglect or delay in registration three absences will be recorded against the student for each day that the registration is delayed. Serious cases will be punished by putting the student on probation, by suspension, or otherwise, as the Faculty may determine.

CHOICE OF ELECTIVES

It is necessary to obtain from each student his choice of electives as early as possible, so that the rolls of the elective classes may be made out before the opening of the term.

All electives for the following term must be chosen, approved by the Advisors, and the cards recording the choices must be filed in the Registrar's Office, two weeks before the beginning of the final examination of each term.

For each day of delay in reporting electives a penalty of

two dollars will be imposed, unless the penalty is remitted for cause on recommendation of the Executive Committee of the Board of Advisors, by the Dean of the Faculty. No changes in the choice made of electives will be permitted, except for reasons approved by the Executive Committee of the Board of Advisors. Applications for such changes must be made in writing, and addressed to the Executive Committee through its Secretary, the Registrar, and no change will be permitted, except to correct irregularities or to bring a student's choice into conformity with the University regulations, later than one week before the beginning of class exercises for the First Term, or, for the Second Term, after the final date for filing electives.

Serious cases shall be punished more severely as the Faculty may determine. If the student enter any elective class after exercises with that class have been held, he shall be reported by the instructor as absent from those exercises.

REGULATIONS CONCERNING ATTENDANCE

1. The Dean of the College has charge of all matters pertaining to attendance on chapel and class exercises. Office hours from 2 to 3 p. m. daily except Saturday, in Nassau Hall.

2. Every undergraduate student in residence at the University is required to attend at least one-half of the Sunday chapel services each quarter, unless excused by the President or the Dean of the College. Failure to comply with this rule will render him liable to suspension.

3. In case of persistent neglect to attend Sunday Chapel services the Dean of the College has authority to compel attendance at specified times and under specified conditions, under penalty of suspension.

4. Juniors who in their sophomore year maintained a general standing of first or second group, and seniors who in their junior year maintained a general standing of first or second group, are excused from compulsory attendance upon class exercises as long as they maintain a general standing of first or second group.

5. Every other undergraduate student is required to attend the scheduled exercises of his class. A student who for any cause incurs 30 absences in any term or in any two successive terms must take a course of three hours a week in the

next term, which shall displace one of the regular courses which would otherwise be taken by that student. He will thus become deficient to the extent of one course. This deficiency is to be made up later by the satisfactory completion of an extra course in some one term. All absences above 30 will be counted toward an additional extra course. In case of an unavoidable absence for a prolonged period, the application of this rule may be modified by the Faculty upon recommendation of the Dean of the College.

6. If any senior becomes liable for an extra course through absences incurred in the second term, the awarding of his degree shall be deferred until after Commencement. Exemption from the application of this rule may be granted by the Faculty upon the recommendation of the Dean of the College.

7. Any undergraduate student, except one excused from compulsory attendance in accordance with paragraph 4, who absents himself from any class exercise either immediately before or immediately after any vacation during the academic year, shall be placed upon probation if, in the opinion of the Dean of the College, his absence has not been caused by necessity. A student so placed upon probation shall be deprived of the privilege of engaging in any extra-curriculum activity requiring absence from any class exercise during his period of probation, and any student thus placed upon probation who absents himself unnecessarily from any class exercise during his period of probation shall be liable to suspension or dismissal. Every absence incurred before or after vacations shall be counted as a single absence and shall be charged against the gratuity.

8. Flagrant cases of absence will necessitate immediate withdrawal from the University.

HONOR SYSTEM

All written examinations, tests, and written recitations are conducted under the honor system. A student is not watched during an examination by an officer of the University, but he is required to write on his paper a pledge that he has not been guilty of any dishonesty or irregularity in connection with the examination.

The administration of the honor system is in the hands of a student committee, by whose rules it is the recognized duty

of every student to report to the committee any evidence of dishonesty in examination that may come under his observation. If after investigation of such evidence the committee finds a student guilty of dishonesty, it reports his case to the Faculty with a recommendation that he be finally dismissed from the University.

REGULATIONS CONCERNING CONDITIONS AND ABSENCE FROM EXAMINATIONS

I. *Examinations and Standing*

1. A student's standing in any course is determined both by his work during the term and by the final examination.

At the end of each term, reports are made to the Registrar of the standing of every student in the courses which he has taken. If the student's work in a course is above the passing grade, he is reported in one of the five groups defined on page 137. If his work is not above the passing grade, he is reported as having failed in the course.

2. A student fails in a course—

(a) If he does not fulfill the requirements of the course.

(b) If he is excluded from the examination by a Department on motion of his preceptor, class instructor, or laboratory instructor, because of serious failure in his work during the term.

(c) If he is absent from the examination for any cause except illness or some equally compelling reason. In cases of such justifiable absence, examination may be postponed, if the necessary absence

(1) occurs at the time of the examination, or

(2) immediately preceding it, or

(3) has extended over a considerable portion of the term; but if the absence covers more than half a term, the term cannot be counted towards a degree; and if the absence covers less than half a term, the student's schedule will ordinarily be reduced, and he will not be allowed to take examinations in all his courses.

3. In all cases of absence from examinations, permission to take a postponed examination must be requested in writing from the Dean of the Faculty or the Registrar. When the absence occurs at the time of examination, the request should be made as soon as possible and must be made before the first

of September following; in all other cases, the request to postpone an examination must be made before the examination regularly scheduled for the course. Failure to observe these regulations will be considered failure in the course. All postponed examinations are to be taken in the first week of the first term of the next academic year. The result of each of these examinations will be combined with the record of the term's work, precisely as in the case of a regular examination, to determine whether the student has passed or failed in the course.

If a student is justifiably absent from any of his examinations at the end of the first term, or from any postponed examination in September, his academic status for the next ensuing term shall be determined, in accordance with the provisions of Sections II and III below, on the basis of his term grade in each course in which examination has been postponed. Thus, a term grade below passing in a course in which examination is postponed will operate to cause a student to be put on probation, or dropped from the University precisely as though he had definitely failed in the course; and similarly a term-grade above passing in such a course will operate to promote him to the next higher class.

4. Failure in a course will necessitate either repeating and satisfactorily completing it or passing another course which is a lawful substitute for it. There is no lawful substitute for a required course; if a student fails in such a course, he must repeat it. Any course in a group of which one or more must be chosen is a lawful substitute for any other course of that group. Any free elective is a lawful substitute for a free elective.

Note.—If, however, a student who has failed in a required course of the first term shall in the second term of the same year pass, with a standing in the third group or higher, a course designated by the department concerned as a direct continuation of the first term course in question, he may be relieved from the necessity of repeating the first term course; but this course will not be counted as credit for his degree. This provision applies to any course either specifically required or necessary to meet the requirements of a division or department.

5. A student who has failed in any course or is obliged to take an extra course because of absences or because of an en-

trance condition shall proceed to meet such deficiency at the first opportunity. All courses taken for these purposes will displace an equal number of advanced courses and the student's schedule will contain only the normal number of courses. But if a student passes all his courses in one term, he may for the next term take six courses in order to make up his standing.

Note.—A course to be repeated must be marked, "Repeat" on the student's elective card. If one course is to be substituted for another in which the student has failed, it must be marked "Substitute for ....." An extra course taken because of absences or an entrance condition must be marked "Extra for absences" or "Extra for entrance condition."

II. *Failure Resulting in Loss of Class Standing.*

1. The first term freshman schedule contains six courses. The schedule of each of the remaining terms contains five courses. A freshman is not promoted to the sophomore class until he has completed eight courses; a sophomore is not promoted to the junior class until he has completed eighteen courses; a junior is not promoted to the senior class until he has completed twenty-nine courses and has such a record that he may be permitted to take six courses in the first term of senior year. But a student who fails of promotion may, except to satisfy the requirements of previous failures, elect courses of the next higher class. Courses taken as extra for absences or for entrance conditions are not counted for promotion. In determining promotion to the sophomore class the number of extra courses which must be taken in sophomore year to remove entrance conditions will be deducted from the number of courses passed in freshman year, and promotion does not take place unless the number thus obtained is eight or more.

2. A student who has failed of promotion will be placed on probation for the next term, unless he satisfies the Committee on Examinations and Standing that his failure was due to illness or some equally unavoidable causes. Such probation may be continued for a second term by the Committee on Examinations and Standing.

3. A senior who fails in not more than one course in the second term may be given a re-examination, provided his term

grade is above passing. This examination may be taken before Commencement.

III. *Failure Resulting in Loss of Membership in the University*

1. A student who flagrantly neglects his work may have his membership in the University terminated at any time.

2. If a student fails in two of his courses in any term, he shall be warned by the Dean of the Faculty that subsequent failures may result in his losing standing in his class or in being dropped from the University. If he fails in three or four of his courses, he shall be placed on probation for the whole of the next ensuing term. If he fails in five or more courses, he shall be dropped from the University.

3. A student who fails in more than half of his courses during one academic year shall be dropped from the University.

4. A student who in any term fails in three of his courses and whose total deficiencies due to failures, or to courses taken because of excessive absences, or to remove entrance conditions, thereby amount to six or more, shall be dropped from the University.

5. A student on probation because of failures may be dropped from the University at any time for unsatisfactory work. He will be dropped, if at the end of the term of his probation he fails in two or more of his courses. If at the end of this term he fails in any of his courses his probation will be extended to the next term.

IV. *Readmission*

1. A student who has been dropped from the University will not be readmitted unless he can present satisfactory evidence to show that his occupation and conduct during the period of his absence from the University have been such as to afford a reasonable expectation that he will do his University work properly. Except as provided in sections (a) and (b) below, at least a year must elapse before a student who has been dropped will be readmitted.

2. If a student desires readmission, he must make written application therefor to the Registrar, at least three weeks before the date of his desired return. This application must

be accompanied with the evidence referred to above regarding his occupation and conduct during the period of his absence. If, in the period of his absence, he has been a student at another academic institution, he must present the proper certificates from that institution, showing that he leaves it in good standing. In determining the class to which he will be admitted, the Committee on Examinations and Standing will take account of any academic work done in that institution. If he is readmitted, he will be on probation for the term following his readmission.

(a) A freshman who is dropped at the end of the first term may be admitted at the beginning of an academic year to any succeeding freshman class, provided he is at that time free of all entrance conditions.

(b) A freshman dropped for failure at the end of the second term but who failed in not more than two courses in the second term may be admitted at the beginning of an academic year to any succeeding freshman class, provided he is at that time free of all entrance conditions. When thus admitted he will not be credited with any portion of the work of the year at the end of which he was dropped, except that the courses passed in that year may be counted in satisfaction of divisional or departmental requirements and as prerequisites to other courses.

3. A student dropped a second time will under no circumstances be again readmitted.

V. *General Regulations Concerning Deficient and Readmitted Students*

Note.—The first term freshman schedule contains six courses. The schedule of each of the remaining terms contains five courses. Except to remove deficiencies, no student shall receive credit for courses taken in excess of those contained in the regular schedule. A student in regular standing who is free of all deficiencies may take an additional course as a optional course, if he is granted permission to do so by the professor in charge of the course; but such a course is not counted towards the requirements for graduation.

Students desiring to take extra courses to make up deficiencies do so under the following regulations:

1. No student of the three lower classes may take more

than five courses, unless in the preceding term he has passed all the courses for which he was held responsible.

2. A senior whose average standing in the preceding term was in a group higher than the fifth, may apply for permission to take an extra course, even though he failed in one or more courses in the preceding term.

3. No student shall be permitted to take more than six courses in any term.

4. No student who requires fewer than five courses for graduation shall be permitted to take fewer than four courses in his last term. He shall be held responsible for the completion of all the courses which he takes in that term.

VI. *Removal of Entrance Conditions*

1. Opportunities for the removal of entrance conditions by examination are given only at the regular entrance examinations in June and September.

2. A student admitted with entrance conditions will have such conditions cancelled if in his freshman year he maintains a standing of third general group, or higher, throughout the year.

3. A student admitted with entrance conditions, who fails to maintain a standing of at least third general group throughout the freshman year, will have such conditions cancelled in those subjects in which he maintains a standing of third group or higher, throughout the year. A student admitted with an entrance condition in a modern language, except English, will have that condition cancelled if he maintains a standing of third group or higher, throughout the year. A student admitted with an entrance condition in a modern language, except English, will have that condition cancelled if he maintains a standing of fifth group or higher, throughout the year, in the modern language course immediately succeeding the entrance requirement in which he was conditioned.

4. No student under entrance conditions will be admitted to the sophomore class, except by express permission of the Committee on Examinations and Standing. If this permission is granted, the student will be required to take for the removal of the entrance condition a course in the subject in which his condition lies. The course so taken will displace one of the student's regular courses. (See I, 5, above.)

VII. *Fees*

A fee of $3.00 is charged for each postponed examination; also for the examination in a course which has been repeated or which has been taken for the removal of an entrance condition.

VIII. *Administration of the Rules*

The administration of the rules concerning failures, and all other rules which concern the standing of a student in his class, or the standards of scholarship in general, is in charge of the Committee on Examinations and Standing. The Dean of the Faculty is Chairman of this Committee and the Registrar is Secretary. Matters to be brought before the Committee should ordinarily be presented to the Registrar in writing, or may be presented in person at a meeting of the Committee.

FRESHMAN TESTS

(1) At two set times in each term general uniform tests will be held in all the subjects of freshman year, and upon a combination of the marks obtained in these tests and in the recitations, a report of the standing of each student shall be handed in to the Registrar's office within five days from the date of the test.

(2) The deficiencies reported shall be investigated in personal interviews with the students for the purpose of finding out the nature and cause of such deficiencies.

(3) A student who is deficient in eight or more hours shall be put on probation and shall be debarred from participation in all extra-curriculum activities.

(4) A student who flagrantly and persistently neglects his work shall be compelled to withdraw from the University, and shall be subject to the rules governing students dropped at the end of the term.

STANDING

The results of the term examinations are combined with those of the work done during the term to decide the relative standing or rank of the student.

The rank in each course is determined by the instructor, who computes from the term work and examinations the marks

of the class; those who have satisfied the requirements of the course are classified in five groups in the order of merit.

The first group indicates very high standing and contains not more than ten per cent of the entire (college) class.

The second group indicates high standing and contains not more than twenty per cent of the entire (college) class.

The third group indicates medium standing and contains not more than thirty-five per cent of the entire (college) class.

The fourth group indicates low standing and contains not more than twenty-five per cent of the entire (college) class.

The fifth group contains the remainder; it indicates very low standing.

The general rank of a student is determined by combining his group numbers in the several courses in proportion to the allotted schedule time of each. The students whose averages are highest and above an established limit are assigned to the first general group; those next highest to the second general group, and so on through the general groups.

A report of the standing of each student is made to his parent or guardian by the Registrar at the close of the first term and at the close of the year. The latter report gives also the standing for the whole year.

DEGREES

A student who passes his final examinations is ordinarily recommended by the Faculty for the degree appropriate to his course, and if the recommendation is approved by the Trustees, the degree is conferred at Commencement and the diploma of the University is given.

FINAL RANK

The final rank of members of the graduating class is computed by combining the averages for the several years of the course, except that the average for the freshman year is omitted in those cases in which it would lower the standing of the student.

COMMENCEMENT SPEAKERS

The student whose individual rank is highest is ordinarily awarded the Latin Salutatory by vote of the Faculty. The Valedictory is awarded with special regard to the qualifica-

tions of the student as a valedictorian as well as on the ground of scholarship.

In appointing the Salutatorian and the Valedictorian, the scholastic record of all nominees up to the end of First Term of senior year, including a statement of their performance of scholastic duties in the Second Term of senior year, is taken into account before appointments are made.

In the award of all degrees and honors, regard is had to the conduct of the student during his course, and any student who has incurred serious discipline may be debarred from the rank to which otherwise his scholarship would have entitled him.

PART VI

PHYSICAL EDUCATION, ATHLETICS AND STUDENT HEALTH

PHYSICAL EDUCATION, ATHLETICS AND STUDENT HEALTH

THE University lays especial stress upon all measures and provisions that promote the health and physical efficiency of the students. Princeton is particularly happy in its location and in its possession of a campus of 800 acres on the south slope of the ridge upon which the town is built. This open space between the University buildings and Lake Carnegie furnishes unusual opportunities for outdoor sports of all kinds in close proximity to the dormitories and the Gymnasium, the latter serving as the center of administration and providing convenient and adequate facilities for bathing and dressing. The factors concerned in this phase of University work may be grouped under three general heads:

(1) Provision for outdoor sports and athletic contests:

Lake Carnegie for rowing and canoeing; the tennis courts; the golf course; a board track for outdoor running in winter; the playing fields, Brokaw, Goldie, Poe, University, and the Palmer Memorial Stadium, for both intramural and intercollegiate teams in football, baseball, track athletics, and soccer.

(2) Buildings:

The gymnasium, Brokaw Swimming Pool, Osborn Athletic Club House, the Baseball Cage, and University Field House; the Class of '87 Boat House, the Canoe House, the McCormick Field House, and the Isabella McCosh Infirmary.

(3) Administration:

The University Sanitary Committee, the Department of Hygiene and Physical Education, the Faculty Committee on Outdoor Sports, and the University Athletic Association work in close coöperation to formulate procedure, to give instruction, and to supervise the general conduct of all phases of conditions and activities which affect student health and efficiency.

I. Physical Education and Athletics

Physical education and athletics are organized and con-

ducted for the purpose of giving every student a thorough course in general physical training under medical supervision and expert teachers, and to give opportunity and encouragement to participate under the direction of skilled coaches in various forms of competitive athletics for the educational and training values that come from such experience. Every effort is made to keep expenditures for intercollegiate athletics on a moderate scale, to reduce the time required of candidates for intercollegiate teams, to combat abuses that from time to time have crept into the administration of intercollegiate athletics, and to promote in practice and contest ideals of sportsmanship and fair play. At the same time the extension among all the students of participation in various forms of competitive athletics is vigorously promoted through a large variety of intramural contests, both indoors and out.

A thorough medical and physical examination is made of each student on entering college, on the basis of which he is given advice and direction as to his physical activities during his college course. This enables the student to secure the greatest value from this phase of his college work. This physical examination is supplemented by periodical examination required of all those students who are candidates for competitive teams, those who are below par physically as a result either of an illness or some other physical handicap, and by yearly examinations that are optional to other upperclassmen.

Every freshman is required to take a course in Physical Education for three periods a week throughout the year. For one quarter of the year this work consists of a course in introductory physical training, composed of physical drill, personal contact drill, elementary boxing, wrestling, rowing, swimming, life saving, group games, and mass athletics. This course is designed to improve body control and strength, to stimulate the development of mental and physical alertness, to establish habits of regular exercise and to give an experience in various kinds of recreative sports that will be useful in after life.

During the other three seasons of the year freshmen are required to take part three afternoons a week in some form of athletics such as tennis, football, baseball, handball, swimming, boxing, wrestling, soccer, rowing, etc.

Every encouragement and facility is placed at the disposal of upper class students to take part in intramural and intercollegiate athletic sports, both indoors and out, because of their body building, social and character forming values. These activities are promoted and supervised by the students' Intracollegiate Athletic Association, the Department of Hygiene and Physical Education, and the University Athletic Association.

Following is a detailed description of the facilities for the various phases of work mentioned above:

University Field

This field, used chiefly for baseball, has in connection with it the following buildings:

(1) The Osborn Field House, which is a University athletic clubhouse, the gift of Henry Fairfield Osborn, of the Class of 1877, and contains training quarters, dining room, clubroom, bedrooms, baths, etc.;

(2) the *Cage* for indoor winter practice, a brick structure with a clear floor space of 60 x 140 feet;

(3) the *Field House,* containing dressing-rooms, lockers, and baths for the University and visiting teams.

The Brokaw Memorial Building

The *Brokaw Memorial Gateway and Building* were erected in 1892 by I. V. Brokaw, Esq., of New York, in memory of his son, Frederick Brokaw, of the Class of 1892. A wing of this building contains a concrete swimming pool, lined with white tile, 100 feet long by 25 feet wide, which is architecturally combined with the Gymnasium. The Brokaw Building contains also three handball courts and dressing rooms for the swimming squad and for visiting teams.

The Gymnasium

The *Gymnasium,* erected by the alumni, forms with Blair, Little, and Patton Halls, part of the western boundary of the central campus, nearly half a mile in length.

The façade of the Gymnasium comprises two full stories and a tower. The main entrance opens into a trophy hall 50 feet wide by 130 feet long, and affords space for a large

number of athletic trophies, offices for the members of the Department of Hygiene and Physical Education, and the Field Artillery Unit, R. O. T. C.; physical examination rooms, and rooms for boxing, and wrestling. The hall is surrounded by a gallery which is used for trophies and banners.

The Gymnasium proper is entered through the trophy hall. It is 166 feet long and 101 feet wide, and is almost as high as the two-story portion of the building. About its walls is an elevated running-track, twelve laps to the mile. It contains, besides the main hall, which is equipped with apparatus for physical training and competitive games, a standard indoor rifle-range, locker and dressing rooms, lavatories, hot and cold shower baths, seven handball courts, and a rowing room equipped with sixteen machines for indoor practice. The Gymnasium is open daily throughout the university year.

Fields and Courts

Brokaw Field was provided by the alumni for the benefit of undergraduates who are not members of University teams. It contains three baseball diamonds and a 120-yard straightaway running track.

Goldie Field, named after Mr. George Goldie, for many years Director of the Gymnasium, closely adjoins Brokaw Field and is large enough for a baseball diamond and three soccer fields. There are twenty-eight tennis courts on terraces bordering these fields.

Poe Field was laid out in memory of John Prentiss Poe, of the Class of 1895, who was killed on September 25, 1915, in France while serving in the British Army. This field, which is located immediately south of Goldie Field, is 375 feet by 600 feet and provides space for two baseball diamonds or three football fields.

Class of 1886 Memorial Building

This building, presented to the University by the Class of 1886, is located on the Princeton golf course. The building contains ample provision in the way of bath and locker rooms, reception rooms, etc., designed for the use of members of the Princeton Golf Club, with dormitory and kitchen facilities for the use of the members of the Class of 1886 during their re-

unions. Students of the University are eligible to membership in the Golf Club. The 18-hole course extends over 225 acres on University property.

Class of 1887 Boat House

This building, erected by the Class of 1887, is located on the shore of Lake Carnegie, to the west of Washington Road. The dimensions of the building are 170 feet by 100 feet. The first floor contains accommodations for thirty-two shells and a workshop. On the second floor are two locker rooms, a large club room, and an office for the rowing coach.

Canoe House

Located on the Shore Drive on Lake Carnegie, this building is used by the members of the University Canoe Club for the housing of private canoes. Membership is open to all students on payment of a small annual fee. Besides Lake Carnegie, the Millstone River and Stony Brook afford attractive canoeing opportunities.

Palmer Memorial Stadium

The *Palmer Memorial Stadium,* the gift of Edgar Palmer of the Class of 1903, was erected by him as a memorial to his father, the late Stephen S. Palmer, a trustee and generous benefactor of the University. The Stadium is on the tract known as the College Farm, which is leased by the University to the Athletic Association. It is a U-shaped structure with the open end towards the south, permitting a view of the woods along Lake Carnegie, with glimpses of the lake in the distance. It is built of reinforced concrete throughout and seats more than fifty-one thousand spectators.

The Stadium is used for football and track athletics. The playing field is specially designed and constructed, with a very extensive drainage system to provide for complete and quick drainage of all parts of the field. The running track consists of a quarter-mile track with two hundred and twenty-yard straightaway.

Twenty acres of meadow land adjoining the Stadium give ample parking space for all vehicles which may be brought to the largest games.

Nineteen Eleven Football Team Field House

The *Nineteen Eleven Football Team Field House,* erected near the Stadium, is the gift of Cyrus H. McCormick, of the Class of 1879. It provides ample dressing rooms for the members of the football and track teams and for members of visiting teams in those two sports, and has accommodations for two hundred and fifty men. It is designed to harmonize architecturally with the Stadium.

II. Student Health Service

The healthfulness of the town of Princeton is exceptional, a recent report of the State Board of Health showing that among towns in New Jersey having a population of five thousand or more, the mortality of Princeton is easily the lowest.

Nevertheless, the University assumes the responsibility of maintaining a close supervision over those conditions that affect student health, in order that (a) students who are ill may be given immediate and expert care; (b) the incidence and spread of infectious diseases may be reduced to the lowest terms; and (c) so that the general working efficiency of the students may be maintained at the highest level.

The immediate responsibility for this function rests jointly in the University Sanitary Committee and the Department of Hygiene and Physical Education.

The Sanitary Committee has general control of the administration of the Infirmary, the care of patients, the relations of physicians and nurses to the Infirmary and to each other, the supervision of the sanitary conditions of the University buildings, grounds, and dining halls, and the lodging houses in town occupied by students. It is an administrative body as regards the details of supervision, and is advisory to the Board of Trustees on matters that may affect buildings and grounds.

The Department of Hygiene and Physical Education is responsible for instruction in personal hygiene, the medical examination of students, the supervision of candidates for competitive teams, and the administration of the courses in Physical Education.

A careful supervision is maintained over the dining halls to provide good sanitary conditions and pure food, and over those employees who come into contact with the food to eliminate disease carriers. In addition a periodical examination is

made of the milk supplied to the students. Further, a careful sanitary inspection, repeated as often as conditions may indicate, is made of all the lodging houses in town which are occupied by students who are unable to find accommodations on the campus. Proprietors of these lodging houses are required to report without delay to the University office, any cases of illness which may occur among the students in their houses; also the janitors in the University dormitories are required to turn in a daily report of any students who may be ill in their rooms. These reports of illness are immediately forwarded to the University physicians to be investigated, and if, in their judgment, the student should be removed to the Infirmary, it is done.

Isabella McCosh Infirmary

The *Isabella McCosh Infirmary* is the University hospital. It is equipped with all the conveniences of modern hospital construction and comprises two separate buildings connected by a corridor. One of these is reserved for contagious diseases and for cases requiring special isolation. Facilities at present permit the isolation and care of four different kinds of contagious diseases at one time, if necessary.

The Infirmary is under the constant and careful supervision of the University Sanitary Committee, the University physicians, and the Infirmarian who is an experienced trained nurse. Five assistant nurses are in residence, and a housekeeper and regular servant staff are maintained.

As the Infirmary is not fully endowed, each student pays an annual fee of $10 ($5 per term) which in all cases of ordinary illness procures for him, without other charge, the necessary care, including board, nursing, laundry and physician's service. When a special nurse is required an additional charge is made. When an illness extends beyond a week, board is charged after the first week at the rate which the student pays at his usual boarding place. When he is at the Infirmary, his board is rebated at his boarding place. Consultations and dispensary treatment are given daily between 8.30 and 10.30 a. m. and from 4.30 to 5.30 p. m. by the University physicians at the Infirmary without extra charge. Students are encouraged to avail themselves of these opportunities so that minor disabilities may be given early and effective treatment,

thus preventing the delay which may lead to more serious conditions, and the consequent loss of time from studies.

Daily reports of admissions and discharges from the Infirmary are made to the several administrative offices of the University, and in case of the appearance of a contagious disease, those students who have been in contact with the sick student, are kept under careful supervision, in order to make it possible to give early treatment whenever necessary and to prevent the spread of the infection.

Infirmary Regulations

1. The Sanitary Committee shall have general control of the medical administration of the Infirmary, the care of patients, and the relations of physicians or nurses to the Infirmary or to each other, subject to the approval of the Board of Trustees.

2. A University Physician will be in attendance at the Infirmary daily from 8.30 to 10.30 a. m. and from 4.30 to 5.30 p. m., Sundays from 9.30 to 10.30 a. m. There will be no charge for students for consultation and treatment at the Infirmary.

3. Any physician legally registered or licensed to practice medicine in the State of New Jersey will be privileged to attend patients in the Infirmary upon the approval of the Sanitary Committee. Physicians who desire to attend patients at the Infirmary will make application to the Secretary of the Sanitary Committee. This rule does not apply to physicians or surgeons called in consultation by an attending physician.

4. Every student who becomes ill must report at once to the Infirmary for examination by the University Physician. If taken ill in his room and unable to go to the Infirmary the University Physician should be notified immediately at the Infirmary.

5. Assignments of patients to individual rooms at the Infirmary will be made at the discretion of the University Physicians.

6. Should the number of patients at the Infirmary at any time become so large as to require the removal elsewhere of convalescents to make room for cases of serious illness it shall be the duty of the University Physicians to determine which patients may with safety be removed in the emergency.

7. Only emergency cases will be operated on at the Infirmary.

8. Every patient will be required to leave the Infirmary promptly after being dismissed by his physician.

9. If special nurses are required they will be procured at the direction of the University Physician and controlled by the Infirmarian and an extra charge of $3 a day made to the patient. A charge for special nursing is made for all contagious diseases.

10. A special charge of $1 per picture is made for the use of the X-Ray machine.

11. Visitors will be admitted between the hours of 1.30 and 5.30 p. m. Visitors are not admitted to the contagious ward.

At the end of each year, a careful statistical study is made of the cases of illness which have occurred, for the purpose of comparison with records of previous years, and to serve as a basis for such action as may seem necessary to correct conditions that may appear to be in any way contributory to the occurrence of illness among the students.

Ladies' Auxiliary

Every effort is made to humanize the service for sick students and to give the patients and their visiting parents the kind of personal help and attention that is so desirable in time of trouble. In this respect, as in others to be mentioned, the services of the *Ladies' Auxiliary* are invaluable. This organization has a membership of nearly six hundred ladies who have made themselves responsible for contributions to purchase for use in the Infirmary, linen, surgical dressings, furniture, apparatus, and equipment; they have established a fund to provide special nursing for boys who cannot afford the extra expense; they have collected an endowment fund to meet the expenses of the Infirmary when they exceeded the amount available from student fees; they have provided and entirely maintain a separate building for a nurses' home, thus releasing space for sick students; they are engaged in raising a fund for a new Infirmary; and they have adopted the plan of appointing a visiting committee, the members of which keep in helpful touch with patients and visiting parents. The services and generosity of this organization therefore not only

help to relieve the University of a heavy financial burden, but have also established an atmosphere of personal interest and helpfulness in the Infirmary that prevents it from becoming institutionalized.

PART VII

UNIVERSITY LIBRARY, RELIGIOUS WORSHIP AND ACTIVITIES, PUBLIC LECTURES, UNIVERSITY STORE, UNIVERSITY PRESS

THE UNIVERSITY LIBRARY

ERNEST CUSHING RICHARDSON, PH.D., *Director*
JAMES THAYER GEROULD, A.B., *Librarian*
HENRY BARTLETT VAN HOESEN, PH.D., *Assistant Librarian*
HOWARD SEAVOY LEACH, A.M., *Reference Librarian*
LAWRENCE HEYL, *Acquisitions*
G. VINTON DUFFIELD, *Circulation (Acting) and Shelves*
LINN RUDOLPH BLANCHARD, A.B., B.L.S., *Catalogue*
GEORGE MANN PECK, A.B., *Special Collections*
JANE WRIGHT, *Art Library*
ELSIE GREEN, *Guyot Hall Library*
FLORENCE LOUISE HURD, *Pliny Fisk Library*

LEWIS FREDERICK PEASE, A.B., *Curator of the Music Library*
LOUIS ELLSWORTH LAFLIN, C.E., *Curator of the Cook Chess Collection*
JOHN I. SCULL, A.M., *Curator of Ex Libris*
SYDNEY RICHMOND TABER, A.M., *Curator of European War Posters Collection*
CHALFANT ROBINSON, PH.D., *Curator of Mediaeval Manuscripts*

THE UNIVERSITY LIBRARY

THE Library began with the College, Governor Belcher, the patron of the College, directing his especial attention and interest to it, and leaving to it his collection of 474 volumes. When the first catalogue was printed in 1760 the Library consisted of about 1,300 volumes. It was decimated during the Revolution and in 1796 numbered only 2,300 volumes. It was partly destroyed by fire in 1802. In 1816 it numbered 7,000 volumes; in 1839, 8,000; and in 1850 it had advanced to 9,313 volumes. In 1868 it contained but 14,000 volumes, without separate building or librarian.

THE CHANCELLOR GREEN LIBRARY

In 1868 the Elizabeth Fund for the purchase of books was created by John C. Green, Esq., and in 1872-73 he erected a library building, named in honor of Chancellor Green. The Chancellor Green Library building is the working library of the University for undergraduates. It contains the standard

and latest works, as well as reference books, in all departments. In addition it contains the following special collections:

The Charles Ewing Green Alcove. The alcove facing the public entrance to the Chancellor Green Library has been set aside as a memorial to Charles Ewing Green, of the Class of 1860. It contains a memorial tablet erected by Mrs. Charles E. Green, and a select library of classical philology.

The Dixon Memorial, containing books illustrative of current life and thought established by his friends as a memorial to William Boulton Dixon, of the Class of 1915.

The Class of 1883 Library of Political Science and Jurisprudence, founded and endowed in 1893.

The Class of 1889 Library of American History, established and endowed in 1899.

Pyne Library

Provision was made on the occasion of the Sesquicentennial by Mrs. Percy Rivington Pyne, for a new building with a capacity of 750,000 volumes gross, besides administration rooms, twenty rooms for instruction and research, a room for the exhibition of rare books, and a series of rooms for special reading and reference work in History, Political Science and Social Sciences. This building forms a hollow quadrangle of about 160 feet square, connected with the Chancellor Green Library by a delivery room, of 50 by 20 feet, and is fitted with modern improvements. On the exterior of the western tower gateway are statues of Presidents Witherspoon and McCosh, James Madison, Class of 1771, fourth President of the United States, and Oliver Ellsworth, Class of 1766, second Chief Justice of the United States Supreme Court.

The Central Collection

The general collection, which occupies the united buildings, consists of 469,506 volumes, including deposits, and 106,093 unbound periodicals and pamphlets. It includes, in addition to those already mentioned, the following special collections:

Special Collections

The Autograph-Manuscript Collection, relating chiefly to the history of the University. This includes the Pyne-Henry

collection, the Abbott papers, the Hunt papers, the Miller papers, the Maclean papers, the Russell W. Moore collection of Princeton autographs, and others.

The Morgan Collection of Virgils, presented by Junius S. Morgan, '88.

The Patterson Collection of editions of Horace, presented by Robert W. Patterson '76.

The Pierson Civil War Collection, presented by John S. Pierson, '40.

The Paton Spanish War Collection of newspapers and magazines, presented by William Agnew Paton, Esq.

The European War Collection, including the *Strong Collection* on the Economic Aspects, and the *Pitney Collection* on the International Law Aspects of the war.

The Princeton University Collection, including the large collection of Princetoniana presented by Professor William Libbey, '77, the Witherspoon collection, and the Cleveland collection.

The Class of 1875 Library of English Poetry and Drama.

The Class of 1878 Library of Chemistry and Engineering.

The Mrs. J. O. H. Pitney Collection of books on International Law and Diplomacy, presented by Mrs. John Oliver Halsted Pitney.

The Music Library, founded by Rudolph E. Schirmer, '80, John W. Garrett, '95, and Lewis F. Pease, '95.

The Garrett Collection of Oriental Manuscripts, consisting of about 2,400 manuscripts, chiefly in Arabic, but including 334 manuscripts in twenty-five other languages, deposited in the University Library, and including books on law, medicine, mathematics, natural sciences, poetry, history, biography, geography, travels, rhetoric, grammar, and lexicography, as well as works on the Mohammedan religion and the exegesis of the Koran.

The Collection of Cuneiform Documents, consisting of approximately 1,200 items founded by M. Taylor Pyne, '77, Junius S. Morgan, '88, and others; and enlarged by gifts of Professor R. E. Brünnow, Robert Garrett, '97, Cyrus H. McCormick, '79, Russell W. Moore, '83, M. Taylor Pyne, '77, Wilfred J. Funk, '09, George W. Gilmore, '83, and others.

The Willard Porter Law Library, presented by Mrs. Willard Hall Porter and her son, W. H. Porter, Jr., 1903.

The Pliny Fisk Statistical Library, presented by Pliny Fisk, '81.

The Samuel Miller Collection, presented by Samuel Miller Breckinridge Long, 1903, in memory of Judge Samuel Miller Breckinridge, '50.

The Bower Collection in History and Literature, from the library of Lawrence Foster Bower, '96.

The Bergen Collection of rare and choice books, chiefly modern, presented by the Rev. G. S. Bergen in memory of his son, Ernest G. Bergen, '95.

The Ivy L. Lee Collection, on Russia, presented by Ivy L. Lee, '98.

The Whig Hall Collection, presented by Whig Hall.

The Clio Hall Collection, presented by Clio Hall.

The Philadelphian Society Collection, presented by the Philadelphian Society.

The Nelson Collection of New Jerseyana; 2,520 volumes and pamphlets relating to the history of New Jersey, presented by the Hon. William Nelson, (hon. 1896).

The Collection of New Jersey Imprints, presented by the Hon. William Nelson, (hon. 1896).

The Collection of Books for the Blind, English, Greek, and Latin, printed in American Braille and New York Point.

The David Paton Collection of Oriental Philology and History. (See Semitic Seminary under Seminary and other Special Libraries).

The Van Deusen Collection of Railroadiana, deposited by E. Van Deusen, Esq.

The Brünnow Collection of Oriental Studies, the library of Professor R. E. Brünnow, presented by several trustees and other friends.

The Magie Collection, the law library of Chancellor William Jay Magie, '52, presented by William Francis Magie, '79, and Henrietta Oakley Magie.

The William Agnew Paton Library, presented by David Paton, '74, in memory of his brother.

The Frothingham Collection of Literature on Revolutionary Communism.

Special collections, other than books or manuscripts are:

The Hutton Collection of Death Masks, consisting of 81 masks, presented by Laurence Hutton, (hon. 1897).

The Hutton Memorial Collection, consisting of 801 books, together with autographed portraits, paintings, etc., from the library of Laurence Hutton, (hon. 1897), left by him to trustees to be put in some safe place for a permanent memorial and presented by them to the University.

The Meirs Collection of Cruikshankiana, consisting of 894 volumes, with 695 broadsides, original water color drawings, oil paintings, autograph letters, etc., presented by Richard W. Meirs, '88.

The Lytle Collection of European War Relics, collected by Ridgeley Lytle, '13.

The Robertson Collection of European War Relics, first deposited by Malcolm Robertson, '15, and lately presented to the Library by his father, Dr. Victor H. Robertson.

The European War Posters Collection, presented by Benjamin Strong (hon. 1918), John W. Garrett, '95, Sydney R. Taber, '83, and others.

The Strong Collection of Emergency Currency of the European War, presented by Benjamin Strong (hon. 1918).

Seminary and Other Special Libraries

Certain rooms in the Pyne Library Building are available for the use of seminaries. Several have been assigned and provided with special libraries, partly by loan from the main collection, but chiefly by special endowment and purchase. The following have been established:

The Philosophical Seminary. Founded by Mrs. C. B. Alexander (ethics), and by the Class of 1882 (logic and metaphysics). Location: southeast corner, first floor.

The Economics Seminary. Founded by the Class of 1888. Location: southeast corner, first floor, and fifth floor. (See also The Pliny Fisk Statistical Library, under Special Collections.)

The Political Seminary. Founded by various alumni and friends. Location: southeast corner, second floor.

The Classical Seminary. Founded by a friend of the University. Location: southwest corner.

The English Seminary. Founded and supported by Charles Scribner, '75. Location: northwest corner, first floor.

The Romance Seminary. Founded by the Class of 1890. Location: adjoining the south stack.

The Mathematical Seminary. Founded by John L. Cadwalader, '56; Professor M. Allen Starr, M.D., LL.D., '76; David B. Jones, '76; Thomas D. Jones, '76; Chandler W. Riker, '76; and the Hon. Adrian Riker, '79. Location: northwest corner, second floor.

The Historical Seminary. Founded by Mr. and Mrs. M. Taylor Pyne in memory of Robert Stockton Pyne. Location: southeast corner, second floor.

The Germanic Seminary. Founded by the Class of 1891, and including the library of Professor Willard Humphreys. Location: adjoining the south stack.

The Semitic Seminary, including the Paton Collection of Oriental Philology and History. Location: north stack, west tower, fifth floor, and room adjoining.

Department Libraries

These are libraries selected from the general collection, and kept in proximity to the corresponding laboratories. The following are organized:

Art; the Marquand Collection, presented by Professor Allan Marquand, '74. Art Museum.

Astronomy. Observatory of Instruction.

Biology (including Botany and Zoölogy); founded by Charles W. McAlpin, '88, and supported largely by Mr. McAlpin and the Frank Hartley Memorial Fund. Guyot Hall.

Geology and Palaeontology. Guyot Hall.

Physics; the Brackett Library, presented by Stephen S. Palmer, David B. Jones, '76, and Thomas D. Jones, '76. Palmer Physical Laboratory.

Use of the Library

The Library is open from 8 A. M. to 10 P. M. on weekdays and, for reference use, from 12 M. to 5 P. M. on Sundays during term time. In vacation it is open on weekdays from 9 A. M. to 5 P. M.

Books may be drawn by officers and students of the University and Theological Seminary, and by any person properly introduced. Periodicals and new books in the Dixon collection are loaned for one week. Other books are loaned to undergraduates for two weeks, to Fellows and graduate students for four weeks, and to officers for any reasonable time.

All books may be renewed when due, unless wanted by other readers.

Fines are charged at the rate of two cents a day on all books kept over time. If an overdue book is wanted at the Library it may be sent for and a charge of ten cents made for messenger. Postal cards are sent as a reminder of books overdue only when the books are wanted by others. No books may be drawn while there are unpaid fines.

A pamphlet manual of rules and directions is issued free of charge.

The Hall Libraries

The American Whig and Cliosophic Societies and the Philadelphian Society have turned over a large part of their books to the University Library, but each has in its own building a convenient working library.

The Theological Seminary Library

Students of the University are allowed to use the library of the Princeton Theological Seminary, which contains 111,550 volumes, in two buildings. The one, the general library, is open for consultation and loan of books from 9 A. M. to 4 P. M. and from 7 to 10 P. M. on week-days. The other, the reference library, is open every week-day from 9 A. M. to 5 P. M., and from 7 to 10 P. M. On Saturday, in both buildings, the hours are from 9 A. M. to 1 P. M. and from 2 P. M. to 5 P. M.

Summary of Libraries

University Library	469,506
Hall Libraries	5,000
Theological Seminary Library	111,550
Total (exclusive of pamphlets and duplicates)	586,056

RELIGIOUS WORSHIP AND ACTIVITIES

The President of the University is the responsible center of the religious activities of the University, having direct charge of the chapel services, while the executive details are ordinarily cared for through the Board of Directors and officers of the Philadelphian Society in Murray-Dodge Hall.

The Philadelphian Society

This Society was founded in 1825. From it, in 1877, went the group of students who established the Student Department of the Y. M. C. A., out of which has sprung the World's Student Christian Federation. The Student Volunteer Movement for Foreign Missions also was started by members of the Society.

Murray Hall, erected in 1879 from a bequest left for the purposes of the Society by Hamilton Murray, of the Class of 1872, contains an auditorium and a room for general social and business purposes. Dodge Hall, connected with Murray Hall by a cloister, is the gift of the late William E. Dodge, and his son, Cleveland H. Dodge, of the Class of 1879, in memory of the late W. Earl Dodge of the same Class. The privileges of the building are extended to all students of the University, irrespective of their relations to the Philadelphian Society.

I. Religious Courses and Lectures

A very complete series of courses covering the different approaches to the field of religion is ordinarily presented to the undergraduates of the University and voluntary courses in the History of Religions, the Philosophy of Religion, the Literary Study of the Bible, the Scientific Approach to Christianity, the Old Testament, the New Testament, Foreign Missions, Social Service, and the general problems of morality and character, have been offered, and a special series of open lectures on the Fundamentals of Christianity has been established.

II. Religious Worship

Divine Service is held in Alexander Hall each Sunday morning at 11 o'clock, at which attendance is required. An in-

formal vesper service is held in Murray-Dodge Hall on Sunday evenings at 7.15.

A service is held each week-day morning in Murray-Dodge Hall from 10.00 to 10.15 at which attendance is voluntary.

The Sacrament of Holy Communion is celebrated by the President of the University in Murray-Dodge Hall twice during each college year—in the fall and during the spring term.

Any student may register for Sunday attendance in one of the town churches, and his presence there will be credited in place of attendance at the University Service.

III. Directors and Officers

The directors and officers of the Philadelphian Society are:

Board of Directors

John Grier Hibben '82, *Ex-Officio*
John McDowell '94, *Chairman*
Paul Matthews '87
Robert E. Speer '89
T. H. P. Sailer '89
Robert Garrett '97
Christy Payne '95
Ralph W. Harbison '98
Charles E. Beury '03
Norman B. Tooker, M.D., '06
Timothy N. Pfeiffer '08
Cleveland E. Dodge '09
John Colt '14
George W. Perkins '17
Charles W. McAlpin '88, *Treasurer*

General Consulting Secretary
S. M. Shoemaker '16

Associate Secretaries
Donald W. Carruthers '15
Charles H. Haines '21

THE ST. PAUL'S SOCIETY

The St. Paul's Society is composed of students who are connected with the Episcopal Church. Trinity Church, Princeton, is responsible for its existence and has had a Student Pastor on the campus for twenty years.

The aim of the Society is worship, Christian education and work. The Parish Church is the center for worship, week-day as well as Sunday; Christian education is provided for by conferences dealing with Christian subjects, Confirmation classes, and other classes formed for instruction; work is carried on in the Parish and in several missions near Princeton. The Society coöperates with the Philadelphian Society on matters of social welfare.

PUBLIC LECTURES

TRASK LECTURES

The income from $10,000, presented by the late Spencer Trask, of the Class of 1866, is available to secure the services of eminent men to deliver public lectures before the University on subjects of special interest.

STAFFORD LITTLE LECTURESHIP ON PUBLIC AFFAIRS

Founded in 1899 with a gift of $10,000 by the late Henry Stafford Little, of the Class of 1844. At the suggestion of the donor, the Hon. Grover Claveland, ex-President of the United States, was invited to deliver before the students of the University "such lectures as he might be disposed to give from year to year," and until his death in 1908 Mr. Cleveland was the Stafford Little Lecturer. Since that time it has been customary to have a different lecturer every year.

The Stafford Little Lectures are published by the Princeton University Press.

THE LOUIS CLARK VANUXEM FOUNDATION OF PRINCETON UNIVERSITY

A bequest of $25,000 under the will of Louis Clark Vanuxem, of the Class of 1879. By direction of the executors, the income of this foundation is to be used for a series of from four to six public lectures before the University annually, at least one half of which shall be on subjects of current scientific interest. The lectures are to be printed and distributed among schools and libraries generally. They are published annually by the Princeton University Press.

UNIVERSITY LECTURES ON CHRISTIANITY

Established in 1914 by the Board of Trustees as an annual course of university lectures on the Nature of Christianity or on the History and Literature of the Bible, to be given each year by a scholar of recognized ability and learning.

THE ALBERT PLAUT CHEMICAL CLUB FUND

Established in 1912 with a gift of $5,000 by Mr. Albert Plaut, of New York. The income is to be used for the benefit

of the Chemical Club, and primarily for providing lectures before the club by men of distinction in the field of industrial chemistry or a related science.

THE CYRUS FOGG BRACKETT LECTURESHIP

Established in 1921 by the Princeton Engineering Association in memory of Dr. Cyrus Fogg Brackett, formerly Professor of Physics and Electrical Engineering in Princeton University.

A series of lectures is given during the college year on technical subjects by eminent engineers and scientists.

LECTURES—1921-1922

1921

December 1 — SAMUEL INSULL, Esquire,
President, Commonwealth Edison Company,
Chicago, Illinois.

"The Production and Distribution of Electric Energy in the Central Portion of the Mississippi Valley."

1922

January 10 — JOSEPH B. MCCALL, Esquire,
President, The Philadelphia Electric Company,
Philadelphia, Pa.

"Public Policy and Industrial Relations."

February 21 — JOHN W. LIEB, Esquire,
Vice-President, New York Edison Company,
New York, N. Y.

"Leonardo da Vinci—"Artist, Natural Philosopher, and Engineer."

March 15 — CHARLES L. EDGAR, Esquire,
President, The Edison Electric Illuminating Company of Boston,
Boston, Mass.

"The Influence of the Executive Upon the Engineering Practice of the Public Utility."

April 4 — JOHN A. BRITTON, Esquire,
Vice-President, Pacific Gas and Electric Company,
San Francisco, California.

"Pacific Coast Public Utility Development."

April 25 — Dr. N. E. Loomis,
Standard Oil Company,
New York, N. Y.

"The Petroleum Industry."

May 9 — Col. William C. Spruance,
Vice-President, E. I. duPont de Nemours & Company,
Wilmington, Delaware.

"Some of the Personal Problems of a Graduate Engineer."

PRINCETON UNIVERSITY STORE

The Princeton University Store is a coöperative association, membership in which is open to all students and other members of the University upon the deposit of a small fee. The store deals in textbooks used in the University, stationery, athletic goods, Princeton souvenirs, confectionery, etc. The members of the store have the privilege of purchasing at a discount from the regular retail price and in addition receive a yearly dividend based on the total amount of their purchases.

PRINCETON UNIVERSITY PRESS

The Princeton University Press, whose building was erected and equipped by Charles Scribner, of the Class of 1875, is organized under the act providing for "associations not for pecuniary profit," and its objects, as set forth in its charter, are "in the interests of Princeton University to maintain and operate a printing and publishing plant for the promotion of education and scholarship, and to serve the University by manufacturing and distributing its publications." It also publishes several periodicals and does considerable printing for individuals and institutions in addition to the work furnished by Princeton University.

To date its list of book publications comprises more than one hundred volumes. They may be obtained from any bookseller or direct from the publishers and a complete catalogue may be had by addressing the Princeton University Press, Princeton, N. J. Its books are all published in England by the Oxford University Press.

PART VIII

EXPENSES, ALLOTMENT OF ROOMS, UNIVERSITY DINING HALLS, UNIVERSITY BILLS, PRIZES, REMISSION OF TUITION, SCHOLARSHIPS, MINISTERIAL AND CHARITABLE FUNDS, STUDENT EMPLOYMENT

ESTIMATE OF ANNUAL EXPENSES

THE table given below contains *average* minimum, medium, and maximum estimates of the necessary expenses for one year of an undergraduate student occupying an unfurnished room in a dormitory. These estimates do not include matriculation and graduation fees, laboratory fees for courses in Chemistry and Physics, apparatus deposits, Hall dues, cost of books, clothing, furnishing for rooms, traveling and vacation expenses, and incidentals.

	Min.	*Med.*	*Max.*
*Board, 36 weeks at $8.00 per week	$288.00	$288.00	$288.00
†Tuition fee	300.00	300.00	300.00
‡Room Rent	35.00	115.00	250.00
Heat and Light	26.00	47.00	56.00
Library fee	5.00	5.00	5.00
Infirmary fee	10.00	10.00	10.00
Department of Physical Education fee	10.00	10.00	10.00
Washing 36 weeks	36.00	36.00	36.00
	$710.00	$811.00	$955.00

SPECIAL FEES

Matriculation Fee.—A matriculation fee of $5 is payable on matriculation.

Graduation Fee.—A graduation fee of $12 is payable in second term of the senior year.

Laboratory Fees.—A fee of $5 per annum is charged for the courses Physics 101, 102, and Physics 201, 202. A fee of $7.50 to $18.00 per term is charged for courses in Chemistry involving laboratory work (use of the Chemical Laboratory one afternoon per week, $7.50 per term; two afternoons per week, $13.00 per term; three afternoons per week, $18.00 per term).

Apparatus deposits.—Students pursuing laboratory courses

* Freshmen and Sophomores are required to board at the University Dining Halls. For reduction of the cost of board see under Bureau of Appointments and Student Employment.

† Remission of tuition is granted under certain conditions to students needing assistance. See under Remission of Tuition.

‡ See under Allotment and Rental of Rooms.

are required to make deposits to cover cost of apparatus injured or destroyed. At the end of each term any balance in favor of the student is placed to his credit on the bill for next term. The deposits are:

General Physics $5.00; Chemistry, $10 to $15 each course (two terms); Geodesy, freshmen Second Term $10, sophomores, Second Term $15, juniors, both terms $10, seniors, First Term $5.

Students taking courses in Graphics will require a drafting outfit costing from $18.00 to $25.00.

ALLOTMENT AND RENTAL OF ROOMS

A list of dormitory rooms with their rental prices may, on application, be obtained from the Office of the Treasurer.

I. Rooms will be assigned *members of the University* for occupation during the following academic year between the 15th of May and 1st of June of each year.

II. This assignment will embrace:

(*a*) All rooms occupied by students whose connection with the University will terminate at the end of the academic year.

(*b*) The rooms of all seniors, whether with room-mate or not (unless the room may be retained by a graduate or for a brother, as elsewhere provided in the rules).

(*c*) All rooms for which the lease has not been properly renewed.

III. An allotment may also take place at the close of the first term of each academic year for the purpose of assigning such rooms as may then fall vacant.

IV. (*a*) The assignment of rooms will in all cases not herein specially excepted take place in such a manner that specific room shall be assigned by lot.

(*b*) The rooms to be assigned are classified according to the amount of their rental, without heat and light, in eight groups. The rental in all cases includes the necessary painting, papering, etc.

(*c*) The applicants for rooms will be divided into corresponding groups, each applicant being required to inform the Treasurer in writing before the 10th of May, or the 20th of January, as the case may be, both of his intention to enter the drawing and of the group in which he wishes to be placed.

Every applicant for a room shall agree beforehand, and shall be required, to take the room which may be assigned to him by lot in the group in which he has made application.

(*d*) Each drawing will begin with the first group and proceed from that group successively through the several higher groups. Any applicant who does not obtain a room in the group to which he first asked to be assigned may be allowed to draw in the next higher group.

(*e*) If there be any rooms remaining unassigned after a drawing such rooms may be assigned by subsequent allotment at such time before the end of the year or of the term as the Treasurer may appoint; such supplementary allotment to be made under the same rule as the principal allotment with this exception, that the rooms disposed of by means of it may be classified in the same way or not, at the discretion of the Treasurer.

(*f*) a. Priority in the drawing will be determined by the length of time the applicants have been members of the University. The first drawing will include the names of all applicants who have been members of the University for more than one year. A second drawing will include the names of all applicants who have been members of the University for one year or less.

b. If the application for a double room is signed by students who have been members of the University different lengths of time, it will be classified and placed in the drawing in which the student who has been a member of the University the shortest length of time would be placed.

(*g*) a. On or before the 5th day of May there will be drawn by lot from all single and double rooms available for occupancy in the fall, accommodations for *150 entering freshmen,* equitably distributed among the several groups according to rental.

b. The Registrar of the University will send to all candidates for admission to the *freshman class,* who have been *admitted at the June examinations,* a statement of the location and number of rooms reserved throughout the dormitories for the use of freshmen, together with the rental to be charged in each case. The student to whom a room may be allotted is under no obligation to purchase furniture which may have been allowed to remain in the rooms as the property of the

former occupant. Accompanying this statement will be a form of application blank which may be filed with the Treasurer at any time prior to July 23, upon which the entering student may indicate in what group he desires to draw for a room and whether, in the event of his failure to draw a room in the group first chosen, he is willing to enter his application in the next higher group.

(*h*) Double rooms are separately classified and allotted in accordance with the above regulations. Only such suites as consist of a study and two bedrooms are considered double rooms within the meaning of this clause. No double room can be assigned to a single individual, nor is it within the privilege of any single individual to draw for a double room. Every application for a double room must contain the names of two persons who intend to occupy the room together and who undertake to be jointly responsible for the rent of the same.

(*i*) Whenever for any reason one of the occupants of a double room is permitted or obliged to cancel his room lease, the remaining occupant must vacate the room at the end of the current academic term, unless he agrees to pay the whole rent, or provide a room-mate.

V. (*a*) The tenure and liabilities of those to whom rooms are assigned under these rules shall be the tenure and liabilities expressed in the following lease, which must be signed in the case of each room allotted by the student who is to occupy it, and by his parent or guardian. This lease must be signed and delivered to the Treasurer in each case within ten days of the allotment, except in the case of new students, provided for under Rule 4g.

This agreement, made the day of 19 between the Trustees of Princeton University and

Witnesseth that the said Trustees of Princeton University do hereby lease unto the said
Room No. in the Entry of to hold for the University year 19 , paying therefor during the said term unto the said Trustees of Princeton University the yearly rental of $ in two equal payments, to be made the one within the first four weeks of the first term of the University year, the other within the first four weeks of the second term of the University year.

By signing this lease the said Trustees do not become responsible for the furniture of the occupant of the room.

Furniture left in a room after the expiration of the lease remains at the owner's risk.

This lease is made on the express condition that it may be terminated by the said Trustees through their representative.

THE TRUSTEES OF PRINCETON UNIVERSITY,
By.....*Treasurer*
Parent
.....
Guardian
.....*Student*

(*b*) Any occupant of a college room may retain his room until the end of his undergraduate or graduate course, provided he annually notify the Treasurer of his intention of retaining it and sign a new lease before the 1st of May; otherwise his room will be considered vacant and will be included in the next allotment. In case an original occupant of a double room be left without a roommate at the end of the academic year, he may retain his lease year by year for the balance of his college course on condition of naming another student of the University who will become joint lessee with him for this period. Every double room shall go into the drawings after all those to whom the room was originally assigned have left the University either through graduation or otherwise.

(*c*) The right to occupy a room is not transferable and terminates with the expiration of the lease. Any attempt on the part of the occupant of a college room to sell or transfer, directly or indirectly, his right of occupancy will be deemed a fraudulent transaction. The penalty for violating this rule will be forfeiture of the room by the new lessee.

(*d*) The occupant of a college room shall deposit with the Controller the sum of 50 cents for each key to his room that may be furnished him by the University; and all amounts paid under this clause will be refunded upon return of the key or keys furnished.

VI. (*a*) The seller and buyer of furniture in rooms allotted to students now in college will be required to file in the office of the Controller on or before June 15, a statement signed by each of the students concerned and by their parents or guardians, to the effect that they have agreed upon a mutually satisfactory price for such of the furniture as the buyer is willing to purchase. In the absence of such an agreement being filed on or before June 15, the owner of the furniture will be notified to remove it immediately. If this notice is not complied with, the furniture will be sold by the University authorities.

(*b*) If any of the rooms drawn and held in reserve for the next incoming freshman class contain furniture, the owner of the furniture will be informed that it must be removed not later than the day in September when the dormitories are opened for occupancy; unless the freshman to whom it is allotted shall elect to purchase it at the price fixed by the owner.

VII. No exchange of rooms will be allowed unless formally sanctioned in writing by the Treasurer; and then only upon terms explicitly stated in a written application signed by both parties to the proposed exchange, and not in contravention of the spirit of these rules. Such application will be kept on file in the Treasurer's office.

VIII. When rooms are vacated during a term, the rent must be paid until the end of the term. An occupant of a college room who expects to be absent on leave for a term may be released from the obligations of his lease, provided he notify the Treasurer before the beginning of the term during which he expects to be absent, and give up the room; but no abatement or drawback of room rent will be allowed for any period less than a term, except in special cases to be stated in writing, and by permission of the Treasurer.

The Faculty of the University is directed to suspend or expel every student that may be found guilty of breaking or evading these rules or of injuring or interfering with the person or property of his successor in a room; or of aiding or abetting another in such transgression, evasion, injury, or interference. The Faculty and all its officers are instructed to take the utmost pains, by ordinary or extraordinary means, to discover such offenders and prevent such offences.

The Faculty is further instructed to report, with the evidence discovered, the names of any graduate or outsider that may be guilty of such offenses to the Committee on Grounds and Buildings; and said committee is authorized and directed to procure legal counsel, and when the evidence seems to justify it to take appropriate legal proceedings against any and every offender before a court of law.

THE UNIVERSITY DINING HALLS

Freshmen and sophomores are required to take their meals at the Dining Halls. Juniors and seniors who belong to upperclass clubs eat at those clubs, while non-club men eat either at the Dining Halls or at private boarding houses approved by the Controller. The buildings contain five large dining rooms, two of which are assigned to freshmen, two to sophomores, and one to upperclassmen. There is no fixed seating arrangement and students are encouraged to eat at any table, in their respective rooms, at which they happen at any particular meal to find congenial friends. In addition to the dining rooms, each class has a common or lounging room and a billiard room.

The Dining Halls are subject to constant sanitary inspection. The kitchen is fitted with all the best appliances for cooking and serving on a large scale, and adjoining are a bakery, an ice cream plant, a steam plant and a laundry. The Halls are in charge of a salaried manager who reports directly to the Controller. The object of the Dining Halls is to provide wholesome and abundant food at the cheapest rate compatible with proper service, and amid hygienic and attractive surroundings. The fact that non-club upperclassmen are preferring to eat at the Dining Halls rather than make their own arrangements is believed to indicate that the board provided is better than can be obtained elsewhere. The price of board per week is $8.00. Students who are unable to pay the full price of board are, as far as possible, given employment as waiters at the Dining Halls and thereby earn all or part of the price of board. By waiting upon table for two meals each day, a student can usually earn his entire board. For the third meal, he sits at the table with his classmates. Students who wish to secure employment as waiters should communicate with the *Director, Bureau of Appointments and Student Employment, Office of the Secretary, Princeton, N. J.*

UNIVERSITY BILLS

All university expenses, including board, must be paid in advance to the Treasurer of the University.

Students are required to call at the Treasurer's office in the course of the first ten days of each term, and to give information as to their place of boarding, etc., so that their bills can

be made out. All bills must be paid within the first four weeks of the term. Failure to comply with this rule will deprive the students of the privileges of the University until payment is made, unless excused by special vote of the Faculty.

When a student enters the University before the middle of the term he shall pay in full the usual charges for that term, with the exception of the charges for board; if he enter after the middle of the term, he shall pay one-half. For board he shall pay in proportion to the time.

When a student leaves the University, whether voluntarily or by dismissal, before the middle of any term, one half of the charges for tuition and public rooms for that term will be refunded. But in the case of temporary absence and subsequent return, although the absence be for more than half a term, no such rebate will be granted.

When a student is dismissed from the University for any cause, the advance deposit for board, heat, and light, beyond the time of dismissal, will be refunded to his parent or guardian.

When at the end of the first term the amount of the advance deposit proves to be in excess of the sum required to defray the board or room bills of any student, the excess will be credited on his bill for the next term. At the end of the academic year the amounts overpaid by the members of the *graduating class* for board, room rent, heat, and light will be refunded by the Treasurer to the student's parent or guardian. The parent or guardian of *every undergraduate* will be advised of the amount of excess to the credit of his son or ward, and such amount will be *carried over to his credit on the bill for the first term of the following year.* In case of the withdrawal or dismissal from the University of any undergraduate at the end of the college year, such excess will be refunded by the Treasurer to the parent or guardian, when informed by the Dean of the College that such undergraduate has been withdrawn or dismissed from the University.

PRIZES

ALEXANDER GUTHRIE MCCOSH PRIZE.—The interest of $1,500 will be given annually to that member of the senior class who shall write the best essay in philosophy, including psychology, logic, metaphysics, and the history of philosophy. Any one of the following subjects may be chosen: The Philosophical Significance of the Concept of Evolution; The Philosophical Doctrine of Natural Rights; The Relation of Philosophy to Poetry.

The essay must be presented on or before April 7.

LYNDE DEBATE PRIZES.—Three prizes, the income of $5,000 contributed by Charles R. Lynde, Esq., will be awarded by a committee appointed by the Faculty, to the three successful competitors in a debate held immediately prior to the trials for the appointment of intercollegiate debaters. The debaters are six in number, three from each of the Literary Societies, and are selected by committees appointed by the Societies respectively from their own members in the Faculty.

CLASS OF 1859 PRIZE.—The interest of $2,000, given by the Class of 1859, will be awarded to that member of the senior class who shall write the best essay on Joseph Conrad and pass the best examination on Carlyle's Chartism," Ruskin's "Unto this Last," and J. S. Mill's "On Liberty." The essay must be handed in on or before May 31, and the examination will be held in June.

The subject of the essay for the Class of 1923 will be Joseph Conrad.

GEORGE POTTS BIBLE PRIZES.—The yearly interest of $1,000, given in 1867 by Mrs. Sarah H. Brown, expended in the purchase of two copies of Matthew Henry's *Commentary on the Bible,* will be presented to the two best Biblical scholars of the senior class at the end of their course.

LYMAN H. ATWATER PRIZE IN POLITICAL SCIENCE.—This prize, being the annual interest on the sum of $1,000, contributed by the Class of 1883, was instituted as a memorial of the Rev. Lyman H. Atwater, D.D., LL.D., Professor of Political Science. It will be given to that member of the senior class who shall have passed the best examination and written the best thesis on some subject in political science, to be as-

signed by the professors in charge of Jurisprudence and Politics.

The thesis, which must be in scholarly form and legibly written, must be in the hands of the Chairman of the Department of History and Politics by April 1; the examination will be held on that day. The subject for the thesis in 1921-1922 and the basis on which the examination is to be set will be: Reform of the National Budget.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE.—The late Mrs. Norman White established in memory of her son, Frederick Barnard White, of the Class of 1883, a prize in architecture, yielding $40. The prize is open to the entire junior and senior classes and to special students who take a full schedule of studies. The subject of the essay for the year 1921-1922: Civil Architecture in the Hellenistic Period. The essay must be presented on or before May 15.

CLASS OF 1869 PRIZE IN ETHICS.—The annual interest of $3,000, given by the Class of 1869, will be awarded to that member of the senior class who shall pass the best examination in ethics and write the best essay. The subject of the essay for the Class of 1922 may be chosen from the following: The Meaning and Function of Intelligence in Morality; The Moral Status of the State; The Meaning of Morality for a Naturalistic Philosophy. The essay must be presented on or before May 10.

C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY.—The sum of $100 will be awarded annually at Commencement to that member of the graduating class who shall have maintained a creditable standing in the subject of American history, and who shall have submitted the best written dissertation. The subject of the dissertation for the year 1921-1922 is: The Presidential Campaign of 1916.

The dissertation must be at least 5,000 words in length and must be accompanied by a bibliography of the subject. Specific references to the sources used must be given throughout. To be presented by April 1.

The prize will be awarded by the professor or professors in charge of the Department of American History.

THE NEW YORK HERALD PRIZE.—The yearly interest of $1,000, presented by James Gordon Bennett, Esq., will be given to that member of the senior class, or to the special stu-

dent of satisfactory standing, who shall have taken for both terms of senior year at least two of the courses given by the Departments of History and Politics, and of Economics, and at least one course in English literature for both terms, and who shall have presented the best thesis in English prose upon some subject of contemporaneous interest in the domestic or foreign policy of the United States Government. The thesis, which must be in scholarly form and legibly written, must be in the hands of the Chairman of the Department of History and Politics, by April 1. The subject of the thesis in 1922 will be: The recent Policy of the United States Government in regard to the Control of International Cables.

CLASS OF 1876 MEMORIAL PRIZE FOR DEBATE IN POLITICAL SCIENCE.—This prize is to be given annually by the Class of 1876 to the successful contestant in a debate on a subject of current interest in American politics, to be held on Washington's Birthday, said prize to be the interest of $2,000. The competitors, four in number, one from each class, are to be chosen by a vote of their respective classes.

PHILO SHERMAN BENNETT PRIZE IN POLITICAL SCIENCE.—The interest of the sum of four hundred dollars, the gift of the late Philo Sherman Bennett, of New Haven, Connecticut, will be given to that member of the senior or junior class of the University who shall write the best essay discussing the principles of free government. The essay must be in the hands of the Chairman of the Department of History and Politics by April 1.

The subject for the year 1921-1922 is: Freedom of Speech in War Time.

*SPENCER TRASK DEBATING FUND.—The interest of $3,000, given by the late Spencer Trask, Esq., of the Class of 1866, has been used to promote debating. One third of the interest has been awarded to the best debater in the trials for the intercollegiate debates with Yale and Harvard; one third for library books used in connection with debating; and one third for general debating expenses.

PRIZE IN AMERICAN HISTORY, ESTABLISHED BY THE SOCIETY OF COLONIAL WARS IN THE STATE OF NEW JERSEY.—The sum of $50 will be awarded each year to that undergraduate of Princeton University who shall have submitted the best writ-

* There is at present no income from the Spencer Trask Debating Fund.

ten dissertation upon some subject of American Colonial history assigned by the Department of American History.

The dissertation must be at least 5,000 words in length and must be accompanied by a bibliography of the sources used. Specific references to the sources must be given throughout.

Dissertations in competition must be in the hands of the Registrar before April 1, and must be submitted anonymously. The names of the authors should be enclosed in sealed envelopes and attached to the dissertations.

The prize will be awarded by the professor or professors in charge of the Department of American History, and the decision will be announced at Commencement.

The subject for the year 1921-1922 is: The Attitude of New Jersey toward British Colonial Policy, 1760-1775.

GARRETT PRIZE ON LATIN AMERICA.—The sum of $100, the gift of John W. Garrett, Esq., of the Class of 1895, will be awarded annually, at Commencement, to that member of the Princeton undergraduate body who shall have submitted the best essay upon some subject connected with Latin America.

The essay must be at least five thousand words in length and must include a bibliography of the sources used. Specific references to the sources must also be given throughout.

The essay must be in the hands of the Chairman of the Department of History and Politics before April 1.

The subject for the essay of the year 1921-1922 is: Attempts at Confederation in Central America.

MANNERS PRIZES.—The income from an endowment of $6,000, the bequest of the late Edwin Manners, Esq., of the Class of 1877, is to be devoted annually to the advancement of literary and historical studies.

One half of the income will be awarded annually at Commencement to that student of the Graduate School who shall have submitted the best monograph on the history of New Jersey. This monograph must be at least 25,000 words in length, and must be accompanied by a bibliography of the subject discussed. Specific references to the sources used must be given throughout. The monograph must be in the hands of the Chairman of the Department of History and Politics by April 1. The recipient of the award shall be designated "The Nova Caesarea Scholar."

The subject for 1921-1922 is: New Jersey under the Articles of Confederation.

Of the other half of the income, a suitable portion shall be

expended for a gold medal in the form of a tiger, and this medal with the balance of the money will be given annually at Commencement to that member of the senior class who shall write the best character study or descriptive sketch in prose or verse. The manuscripts must be in the hands of the Chairman of the Department of English by May 1. By direction of the donor, the recipient of the award shall be designated "The Winner of the Golden Tiger."

Laurence Hutton Prize in History.—The income from an endowment of $2,500, given by Samuel Elliott, Esq., as a memorial to his friend, the late Laurence Hutton (hon. A.M. 1897), will be awarded annually at Commencement to that student of the University adjudged by the Faculty to have excelled in the work of the Department of History. The prize is open alike to graduate and undergraduate students.

Charles Ira Young Memorial Tablet and Medal.—A memorial tablet to the late Charles Ira Young, of the Class of 1883, has been placed in the Palmer Laboratory by friends of Mr. Young.

In connection with this memorial, a bronze medal will be awarded each year to the student in the University who excels in research in Electrical Engineering, the medal to be known as the "Charles Ira Young Memorial Medal." The name of the winner of the medal is also to be inscribed each year upon the memorial tablet mentioned above.

Class of 1870 Senior and Junior English Prizes.—Of the yearly interest of $1,500, one half will be given to the best Old English scholar of the senior academic class, and one half to the best English literature scholar of the junior academic class.

Wood Legacy.—The sum of $150, the income of a legacy of Dr. George B. Wood, will be awarded to that member of the junior class who shall stand highest for the junior year.

Junior Orator Medals and Maclean Prize.—Four gold medals, or books of equal value, will be awarded by a committee, appointed by the Board of Trustees, to the four successful competitors in an oratorical contest during Commencement week. The competitors are eight members of the junior class—four from the Cliosophic and four from the American Whig Societies—selected by committees appointed by the Societies respectively from their own members in the Faculty.

The Maclean Prize, founded by the will of the late Henry

A. Stinnecke, Esq., consisting of the sum of $100, will be given to that one of the orators chosen by the Literary Societies from the junior class who shall during Commencement week pronounce the best English oration.

The committee of judges will be composed of a professor of English and two graduates of the University not members of the Faculty.

DICKINSON PRIZE.—The Dickinson Prize, founded in 1782 by the Hon. John Dickinson, of New Jersey, Governor of Pennsylvania and Delaware, consisting of a medal of the value of $60 (or its equivalent in money), will be awarded to that member of the junior class who shall write the best dissertation upon any one of the following themes in logic: The Nature and Validity of Inductive Reasoning; The Theory of Judgment; The Relation of Fact and Theory. The dissertation must be presented on or before May 13.

THOMAS B. WANAMAKER ENGLISH LANGUAGE PRIZE.—This prize, the yearly interest of $1,000, will be given to that member of the junior academic class who shall pass the best examination in English philology, and write the best thesis on some assigned topic therein.

MARY CUNNINGHAM HUMPHREYS JUNIOR GERMAN PRIZES.—Two prizes, of $25 and $15 respectively, established by the late Professor Willard Humphreys, in memory of his mother, Mary Cunningham Humphreys, will be awarded to those members of the junior class who, having taken the regular German course for at least two years (all the courses in the Germanic Section of the Modern Language Department in junior year and either Courses 105, 106 or 201, 202) shall, at the close of the second term, pass the best examination on the work of the term.

R. PERCY ALDEN MEMORIAL PRIZES.—The income of $1,000, given by John P. C. Alden, Esq., of the Class of 1907, and divided into a first and second prize, will be awarded annually to the two members of the junior French course who shall submit the best essays on a subject relating to French memoirs. The essays must be presented on or before May 15.

CLASS OF 1883 PRIZES FOR ENGLISH IN THE SCHOOL OF SCIENCE.—Class of 1883 English Prize for Juniors in the Bachelor of Science Course:—This prize, the annual interest of $1,000, will be given to that member of the junior class, a candidate for the degree of Bachelor of Science, who shall

have done the best work in the English studies of the year and submitted the best essay on a subject in English literature assigned by the English Department. The subject for the year 1921-1922 is : The Middle West in Recent Fiction.

Class of 1883 English Prize for Freshmen in the Civil Engineering Course:—This prize, the annual interest of $1,000, will be given to that member of the freshman class, a candidate for the degree of Civil Engineer, who shall have done the best work in the English studies of the year, and shall have submitted the best essay on a subject assigned by the English Department.

Stinnecke Prize.—The Stinnecke Foundation was established in 1870 by the will of the late Henry A. Stinnecke, of the Class of 1861, and was supplemented by a bequest received in 1876 from his aunt, Miss Marie Stinnecke. The income is divided between the Stinnecke Scholarship of $500 and the Maclean Prize of $100.

The Stinnecke Scholarship, of the annual value of $500, tenable during the undergraduate course unless forfeited by neglect of study, is given *every third year* "to that person who, having entered the sophomore class, passes the best examination at the opening of the session in September, in the Odes of Horace, the Eclogues of Virgil, and the Latin Grammar and Prosody, as well as the Anabasis or Cyropaedia of Xenophon and the Greek Grammar." Students of the University who have been members of the freshman class, as well as new students entering the sophomore class, will be admitted to such examination. The committee of examiners is appointed by the Board of Trustees.

The next competition for this scholarship will be held in the autumn of 1923.

Class of 1861 Prize.—The interest of $1,200, given by the Class of 1861, will be awarded to that member of the sophomore class who shall pass the best examination at the end of the year on the elective mathematics of the sophomore year.

Francis Biddle Sophomore Prize.—This prize, the yearly interest of $500, will be given to that member of the sophomore class who shall write the best English essay of the year.

Class of 1870 Sophomore English Prize.—This prize, the yearly interest of $1,000, will be given to that member of the sophomore academic class who shall pass the best examination on the English studies of the year.

ORANGE ALUMNI ASSOCIATION PRIZE SCHOLARSHIP.—This scholarship, which pays the holder $200 per annum, the income from $4,000, given by the Princeton Alumni Association of the Oranges, will be awarded in accordance with the following conditions:

1. Only those are eligible to compete for this scholarship whose parents or family shall at the time of the competition have been resident for at least one year in the district of the Princeton Alumni Association of the Oranges. They shall present themselves for examination at the time of the entrance examinations in September, and shall take the *comprehensive examinations* in the four subjects required for admission under the "New Plan" to a course leading to a bachelor's degree. These papers will not be read for the purpose of determining the winner until after the candidates have been in residence as regular members of the freshman class.

2. The Faculty shall name as winner of the scholarship that student who stands highest in this examination, and as alternate the student who stands next highest. This alternate may become the holder of the scholarship in case of the death or removal of the winner.

3. The scholarship shall be retained by its winner during his freshman and sophomore years, provided that in his studies he maintains a rank not below the second general group and that he does not come under serious discipline for misconduct.

The last competition for this scholarship was held in the autumn of 1921. The next competition will be held in the autumn of 1923. Candidates intending to compete for the scholarship in any year shall notify the Registrar of their intention not later than September 10 of that year.

THE PRINCETON CLUB OF PLAINFIELD ENTRANCE PRIZE.—The Princeton Club of Plainfield, New Jersey, offers a prize of $50 annually to the resident of Plainfield or North Plainfield who enters the Princeton freshman class with the best examination record, provided he enters without conditions and remains a student in college in regular standing until the Christmas following his entrance.

CLASS OF 1895 MILITARY TACTICAL PROBLEM PRIZE.—This prize of $50, offered by a member of the Class of 1895, is awarded to the student in the course on Military Science and Tactics who presents the best approved written solution of a tactical problem.

REMISSION OF TUITION

Any undergraduate of insufficient means and of good mental ability and serious purpose may apply to the Secretary of the University for remission of tuition. This remission is in the form of a loan, the recipient being required to sign a note for the amount remitted and to subscribe to the following obligations:

I. That he holds himself bound to pay this note in full within one year from date of graduation or of leaving the University, and if not paid within one year the note shall bear interest at 4 per cent per annum from said date of graduation or of leaving.

II. That he give the University successive renewal notes when and as requested.

III. That he keep the University informed of his residence and occupation until this note is paid.

Remission of tuition and renewals are granted for one term and subject to the following conditions:

I. The recipient must be regular in attendance at his college exercises and free from serious discipline.

II. His class standing must not be below the third general group.

III. His board must not exceed $8.00 a week; and his room, if single, must not be above the third group ($87-126, annual rent), nor, if double, above the fifth group ($185-230, annual rent). Students rooming elsewhere than in the dormitories must not pay more than five dollars and fifty cents a week for rent, including light and heat.

In accepting remission of tuition it is understood that a student agrees to devote his best energies to his studies. If his work shall appear to suffer by reason of participation in extra-curriculum activities, or if his scale of living shall seem to be out of proportion to his means, he shall forfeit the remission of tuition even though he shall have complied technically with the rules.

Freshmen who have applied before the opening of the college and whose testimonials as to scholarship, character and need are satisfactory, will be granted remission of one hundred and fifteen dollars from the charge for tuition for the first term, on admission to the University.

Freshmen whose applications are received after the opening of college and students entering from other colleges, whose testimonials are satisfactory, will be granted remission of ninety dollars from the charge for tuition for the first term.

Sophomores, juniors, and seniors who have not previously applied for remission of tuition but through changed conditions, find themselves in need of financial assistance, may apply to the Secretary of the University, provided they have maintained a class standing not below the third general group and have complied with other conditions.

At the opening of the second term freshmen and qualifying students who received remission of tuition and maintained a class standing in the first or second group during the first term will be granted remission of one hundred and fifty dollars for the second term; those who maintained a class standing in the third group will be granted remission of one hundred and fifteen dollars, and, in special cases, those whose standing was below the third general group may be granted remission of ninety dollars for the second term.

At the opening of each term sophomores, juniors, and seniors who have previously received remission of tuition, have maintained a class standing not below the third general group, and have fulfilled the other conditions, will, on application, be granted a renewal, varying in amount from ninety to one hundred and fifteen dollars a term, in the discretion of the Secretary of the University.

Within the first ten days of each term and before their bills are made out, *applicants for remission of tuition or renewals are required to call at the office of the Secretary of the University* for the necessary order on the Treasurer.

The Secretary of the University is authorized, in his discretion, to remit the full charge for tuition in special cases. This will be done only after a personal interview with the applicant.

Students who have previously held remission of tuition and have maintained a class standing in the first or second general group are eligible for University Scholarships in the sophomore and higher years. There are 10 A scholarships of $300 each for first group men, and 30 B scholarships of $275 each for second group men. Award is made according to seniority of class, except that students eligible for A scholarships take preference over all others.

For application blanks apply to the *Secretary of the University, Princeton, New Jersey.*

SCHOLARSHIPS

Scholarships Founded Between 1853 and 1902

(Income now used for University Scholarships)

In 1853 the Trustees authorized the Faculty to take such measures as might seem to them necessary towards securing a number of scholarships with a principal of one thousand dollars each. Pursuant to this authorization, between 1853 and 1902 sixty-four scholarships with a principal of one thousand dollars each were endowed by John Aitken, E. F. Backus, A. B. Baylis, Charles S. Baylis, James Blair, Isaac V. Brokaw, Mrs. P. Bullard, Hons. Simon and Donald Cameron (1), Aaron Carter, Jonathan Cogswell, D.D., Roswell Colt (3), Stephen Colwell, A. Creswell, Hon. Amzi Dodd (the Bloomfield Scholarship), Aaron Fenton, A Friend, A Friend (the Henry M. Alexander Scholarship), A Friend of President Maclean (the John Maclean Scholarship), Friends of President McCosh (the James McCosh Scholarship), Hon. Henry W. Green, Dudley S. Gregory, Richard T. Haines, Gen. N. Norris Halstead, Albert O. Headley, Dr. Hugh L. Hodge, Capt. Silas Holmes (5), Hon. John P. Jackson, Peter Jacobus, Jacob J. Janeway, D.D., Ladies of the Presbyterian Church of Huntington, N. Y., James Lenox (5), Drs. John and George Maclean (1), J. D. McCord, Frederick Marquand, Members of the Class of 1841, the Class of 1856, Members of the First Presbyterian Church of Bridgeton, N. J., Members of the First Presbyterian Church of Peekskill, N. Y., Members of the First Presbyterian Church of Trenton, N. J., Members of the Second Presbyterian Church of Elizabeth, N. J., George W. Musgrave, D.D., Matthew Newkirk, Dr. Samuel H. Pennington, Hon. Nehemiah Perry, Isaac N. Rankin, Harry E. Richards, M.D., George L. Sampson (the Henry J. van Dyke Scholarship), Joseph R. Skidmore, I. S. Spencer, Alanson Trask, Joseph N. Tuttle, Hon. John Van Vorst, William White, and Chandler Withington; and one scholarship with a principal of one thousand five hundred dollars was endowed by Henry M. Flagler.

During the same period twenty-one memorial scholarships with a principal of one thousand dollars each were endowed as follows:

The Cyrenius Beers Scholarship by Miss Julia Beers, the J. S. Bonsall Scholarship by a bequest of Mrs. Susan R. Bonsall, the Albert Dod Brown Scholarship by Mrs. Susan D. Brown, the Grace Newcombe Denning Scholarship by Mrs. William Moir ($1,500), the Finley and Breese Scholarships by a bequest of Samuel F. B. Morse, the Elizabeth Musgrave Giger Scholarship by Prof. George M. Giger, D.D., the Charles Dickinson Hamill Scholarship by Samuel M. Hamill, D.D., the Matthew B. Hope Scholarship by the Trustees of the College of New Jersey as an acknowledgment of the services of Professor Hope in raising an endowment of over one hundred thousand dollars, the Jeremiah D. Lalor Scholarship by a friend, the Harvey Lindsley Scholarship by Mrs. Mary R. Matthews, the Newark Scholarship by the will of Henry Rogers, the Erza Nye Scholarship by F. Wolcott Jackson, the John Joseph Rankin Scholarship by William Rankin, the Laurance Field Stevens Scholarship by Herbert B. Stevens, the Nathaniel W. Townsend Scholarship by Mrs. Daniel Haines, the William Campbell Truesdell Scholarship by Warren N. Truesdell, the Van Sinderen Scholarship by Mr. and Miss Van Sinderen, the Robert Voorhees Scholarship by Mrs. Susan V. Clark, and the Gertrude N. Woodhull Scholarship by Dr. John N. Woodhull.

In 1913 a bequest of one thousand dollars was received from the Estate of Mrs. Mary Hale Chamberlain to endow the Hale Scholarship in memory of Titus Hale and Mary H. Hale, his wife.

UNIVERSITY SCHOLARSHIPS

From the income derived from scholarships founded prior to 1903 forty University Scholarships have been established: ten "A" Scholarships of the annual value of three hundred dollars each and thirty "B" scholarships of the annual value of two hundred and seventy-five dollars each. During the summer these scholarships will be awarded for the first term to members of the senior, Junior, and sophomore classes who have previously received remission of tuition, in accordance with the following rules:

(*a*) The ten "A" scholarships will be awarded to those students whose standing during the previous year was in the first general group. If more than ten students are eligible, award will be made according to seniority of class.

(*b*) The thirty "B" scholarships will be awarded to those students whose standing during the previous year was in the second general group. If more than thirty students are eligible, award will be made according to seniority of class, except that students eligible for "A" scholarships shall take preference over all others.

University Scholarships are awarded in all cases for one term and subject to the following conditions:

I. The holder must be regular in attendance at his college exercises and free from serious discipline.

II. His general group, as shown by his latest semi-annual report, must not be below that in which he stood when the scholarship was awarded to him.

III. His college bill for one term for board, room rent, light, and heat must not exceed two hundred and ten dollars.

IV. A University Scholar who has fulfilled these conditions during the first term of a college year will receive the scholarship for the second term of that year without further action on his part.

ENDOWED SCHOLARSHIPS

Endowment and Administration

1. An Undergraduate Scholarship may be endowed by the payment to the Treasurer of the University of a sum not less than five thousand dollars. Unless otherwise specified by the donor the endowment of a scholarship will be invested with the general funds of the University and the incumbent will receive as his stipend the income of the endowment at the average prevailing annual rate of interest.

2. Regional Scholarships are founded to assist applicants satisfying the considerations named in paragraph 4, who are residents of the regions or locations specified in the terms of the Scholarships, and who without financial assistance might not be able to secure the advantages of an education at Princeton University.

They are awarded by the University either (1) upon recommendation of committees appointed ordinarily by the local Princeton Alumni Association covering the region or locality designated in any particular Scholarship; or (2) upon nomination of the donor, if an individual, during his or her lifetime, or if an Alumni Association, Class, Club or other group,

for a period of twenty-five years. At the end of this time, or at the death of the donor, the right of nomination reverts and rests with the University, unless otherwise provided. If in any year an incumbent is not nominated, the award may be made by the University.

3. War Memorial Scholarships are founded in memory of Princeton men who died in the service of their country, or that of the Allies, in the World War.

They are awarded by the University to applicants in need of financial assistance who satisfy the further considerations named in paragraph 4. The right to nominate an incumbent, however, rests with the donor, if an individual, during his or her lifetime, or if an organization such as an Alumni Association, Class, Club, or group, for a period of twenty-five years. At the end of this period, or at the death of the donor, the right of nomination reverts to and rests with the University, unless otherwise provided. If in any year the donor or organization does not nominate an incumbent the award may be made by the University.

4. The further considerations governing awards are in general those of the Rhodes Scholarships, namely:

a. The candidate's scholastic attainment.
b. His qualities of manhood, truthfulness, courage, devotion to duty, kindliness, unselfishness, fellowship and sympathy for and protection of the weak.
c. His exhibition of moral force of character and of the instincts of leadership.
d. His fondness for and success in manly outdoor sports.

5. Unless otherwise specified by the donor tenure is for one year and renewable, subject however to the observance of the regulations hereinafter stated:

a. A Scholar must be regular in attendance on college exercises and free from serious discipline.
b. A Scholar must maintain a class standing not below the third general group.
c. A Scholar's style of living must be free from extravagance; he may not apply his stipend to pay for his board more than the regular charge for board at the University Dining Halls, or if a member of a club, more than the regular charge at that club for board only; and his room if single must not be above the third group as described in the University Catalogue.
d. All Scholarships shall be held subject to such additional rules as may be adopted from time to time by the Faculty of the University.

Ordinary Scholarships

The scholarships described in the following list may be assigned to students in any undergraduate department of the University unless restricted by the donor to some particular department or departments. It is customary to assign these scholarships, when they become vacant, to undergraduates who have been members of the University for at least one year, and who are considered most worthy to receive the benefit.

For further information apply to the *Secretary of the University, Princeton, New Jersey.*

The Noel Bassett Scholarship: Founded in 1915 with a gift of twenty-five hundred dollars, by friends of the late Noel Bassett of the Class of 1911, and increased in 1921 by his father, Mr. William Robert Bassett, to yield a stipend of five hundred dollars annually. By the deed of gift, the right to nominate the incumbent or to recommend the removal of the incumbent of this scholarship rests with the committee representing the donors, until 1940.

The William Lyman Biddle Memorial Scholarships: The William Lyman Biddle Memorial Scholarships have been founded anonymously in memory of William Lyman Biddle, of the Class of 1874, with a principal of approximately forty thousand dollars, the income of which is devoted to two prize scholarships, awarded annually, one to a member of the Junior Class and one to a member of the Senior Class, at Princeton University, under the following conditions:

1. The Scholarships are awarded by a committee consisting of the Secretary of the University, the Registrar of the University and the Dean of the College.
2. Candidates must have been during their Freshman and Sophomore years dependent, at least partially, on their own exertions for their financial support.
3. The basis of award is:
   (a) scholastic standing for the two previous years, and
   (b) the additional standards applied in awarding the Rhodes Scholarships, namely, qualities of manhood, moral character, instincts of leadership, fondness for and success in manly outdoor sports.
4. The successful candidates shall be known as the Lyman Biddle Scholars and shall conform to the University regulations governing the administration of scholarships, as printed in the University Catalogue.

THE SAMUEL DWIGHT BREWSTER MEMORIAL SCHOLARSHIP: Founded with a gift of six thousand dollars by Mrs. Samuel Dwight Brewster in memory of her husband.

THE ERIC BRUNNOW MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1920 in memory of Eric Brunnow of that Class, who died October 15, 1916. The annual income is two hundred dollars.

THE BUTLER SCHOLARSHIP: Founded in 1892 by William Allen Butler, of the Class of 1876, with a gift of one thousand dollars, which has since been increased to two thousand five hundred dollars.

THE JOHN REID CHRISTIE, JR., SCHOLARSHIP: Endowed in 1913 with the principal of twenty-five hundred dollars, received from the estate of John Reid Christie, Jr., of the Class of 1913. The annual stipend is one hundred and twenty-five dollars.

THE CLASS OF 1878 SCHOLARSHIPS: Dr. John S. Sayre, of the Class of 1878, who died in 1899, made Princeton University his residuary legatee. After creating the Fellowship of Applied Chemistry and the Fellowship of Applied Electricity, the will directs "the balance of my estate, if any, to be used for as many as possible endowed scholarships in the Academic (Classical) Department of the University which are to be known as the Class of 1878 Scholarships." At present there are five scholarships of one hundred and forty-five dollars each under this endowment.

THE CLASS OF 1894 MEMORIAL FUND: Founded in 1919 by the members of the Class of 1894 upon the occasion of the twenty-fifth anniversary of their graduation from Princeton University.

The income from the Fund is applied to assist deserving students, the extent of the assistance given to be within the discretion of the University; provided that in no case shall more than $500 be granted to any one student in a single year. In administering the Fund preference shall be given to descendants of members of the Class of 1894.

THE CLASS OF 1922 SCHOLARSHIP: Founded in 1920 by the Class of 1922. The annual income is two hundred dollars.

THE CLASS OF 1923 SCHOLARSHIP: Founded in 1920 by the Class of 1923. The annual income is two hundred dollars.

THE JOHN H. CONVERSE AND JOHN W. CONVERSE SCHOLARSHIPS (two, an income of one hundred and twenty-five dollars each): Founded in 1904 by the late John H. Converse, with a principal of five thousand dollars. The privileges of these scholarships are to be extended by the Faculty to students looking forward to a seminary course and the Christian ministry, the Presbyterian ministry preferred.

THE EVERETT LAKE CRAWFORD, JR., SCHOLARSHIP: Founded in 1919 with a gift of five thousand dollars by Everett Lake Crawford, of the Class of 1901, and Mrs. Crawford, in memory of their son Everett L. Crawford, Jr.

THE SAMUEL ELLIOTT SCHOLARSHIP: Founded in 1920 by the Estate of Samuel Elliott, with an endowment of five thousand one hundred dollars.

THE ERIC MARQUAND ENOS MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1920 in memory of Eric Marquand Enos of that Class, who died March 20, 1918. The annual income is two hundred dollars.

THE GORDON FORBES MEMORIAL SCHOLARSHIP: Founded in 1919, with a principal of ten thousand dollars, by Mr. and Mrs. John M. Forbes and Mrs. Gordon Forbes in memory of Gordon Forbes, Class of 1905. Awarded preferably to a student in the School of Engineering or the School of Electrical Engineering.

THE HENRY S. GANSEVOORT SCHOLARSHIP: Founded in 1906, with a principal of two thousand five hundred dollars, by Mrs. Abraham Lansing, of Albany, N. Y., in memory of her brother, Henry S. Gansevoort, of the Class of 1855 and increased in 1921 to yield a stipend of $400 annually.

THE WILLIAM ROME GELSTON SCHOLARSHIP; with an income of two hundred and fifty dollars: Founded in 1912 with a gift of $5,000 in memory of William R. Gelston, deceased, of the Class of 1901, "the net annual income thereof to be given in each year to such student in the Academic Department of Princeton University regularly matriculated for a degree, as the President of the University shall consider to be a person of capacity and worthy character, who gives promise of a useful life and is of limited means, such appointee to be designated by said President, and such income shall be used by such appointee, first in the payment of his tuition fees, and

the balance shall be used by him in payment of his board and other necessary university expenses."

THE ANDREW WHITE GREEN SCHOLARSHIP; with an income of two hundred and fifty dollars: Founded in 1905, with a principal of five thousand dollars, by the late Cornelius C. Cuyler, of the Class of 1879, as executor and sole legatee of Andrew White Green. The income is to be used in aiding some needy and deserving student each year through his college course; the student to be designated by the President or Dean.

THE FREDERICK WOLCOTT JACKSON SCHOLARSHIP: Founded in 1905, by a gift of two thousand five hundred dollars from Philip N. Jackson, of Newark, N. J., of the Class of 1881.

THE THOMAS AND LUCY KAYE MEMORIAL SCHOLARSHIPS; two, with an income of ninety dollars each: Founded in 1911 by a bequest of five thousand dollars under the will of John William Kaye, of the Class of 1874.

THE RACHEL LENOX KENNEDY SCHOLARSHIP FUND; with an income of six hundred dollars: Established in 1888 by Miss Rachel Lenox Kennedy, of New York, with a principal of five thousand dollars and increased by the donor in 1890 by a further gift of ten thousand dollars. The income from this fund is used to aid meritorious undergraduates in any department of the University who have maintained high standing in their classes.

THE E. B. KENYON SCHOLARSHIP: Endowed in 1919 with a principal of twenty-five hundred dollars from the bequest of Mr. Job Kenyon in memory of Edwin Bowne Kenyon of the Class of 1895.

THE MAHLON LONG SCHOLARSHIP: Founded in 1904 by Rev. George Wells Ely, of Columbia, Lancaster County, Pa., by a gift of one thousand two hundred and fifty dollars and real estate in Minneapolis, Minn., and Jersey City, N. J., valued at eight thousand seven hundred and fifty dollars.

This scholarship is open to undergraduates, members of either the Academic or Scientific Department, and is intended to be given during the entire course to the same student, although appointments or reappointments may be changed by the person having the power, in his discretion. The donor may, during his life, designate the beneficiary, but in case he

should not do so on or before October first of each year, then the President of the University shall designate the beneficiary, selecting a regularly matriculated candidate for a degree, who, in his judgment, is a young man of limited means, of worthy character and capacity, and who gives promise of a useful life. The net income from this scholarship will be used by the beneficiary for tuition and other necessary expenses, but no more than four hundred dollars shall be paid to any one beneficiary annually; whatever excess income there may be to accrue to the benefit of the fund. The annual stipend is at present three hundred and fifty dollars.

THE MCCORMICK SCHOLARSHIP: Founded in 1894 with a gift of two thousand dollars by Mrs. Cyrus Hall McCormick, of Chicago. The annual stipend is one hundred dollars.

THE ANDREW J. MCCOSH MEMORIAL SCHOLARSHIPS: Founded in 1909 with the principal of ten thousand dollars by the late Mrs. Alexander Maitland in memory of her brother, Andrew J. McCosh, M.D., of the Class of 1877. Preference is given to students in the senior and junior classes. At present there are four scholarships of one hundred and twenty-five dollars each.

THE JAMES HAMMOND MCLEAN, JR., SCHOLARSHIP: Founded in 1920 with an endowment of five thousand dollars by James Hammond McLean, of the Class of 1901, and Mrs. McLean, in memory of their infant son, James Hammond McLean, Jr.

THE S. STANHOPE ORRIS FUND: Professor S. Stanhope Orris, who died in 1905, bequeathed to Princeton University "the sum of Twenty-five Thousand Dollars ($25,000) as a fund, the annual income of which will be divided equally among ten needy academic students of good character and ability, of diligence in study, and exemplary behavior. No candidate for the ministry, however, though needy, studious and possessing ability, shall receive help from this fund unless he pledge himself to continue and do continue the study of Greek regularly to the end of the university course." There are ten scholarships of one hundred and twenty-seven dollars each.

THE SUSAN BREESE PACKARD MEMORIAL SCHOLARSHIP AND THE FRANCIS APPLETON PACKARD MEMORIAL SCHOLARSHIP: Founded by a bequest of five thousand dollars under the will

of Professor William A. Packard who died in 1909. "The income of these scholarships is to be devoted to paying the tuition fees of students in Princeton University pursuing courses of study of which the Greek and Latin languages and literature shall constitute a substantial part. Students of approved scholarship and character who need this aid, and such only, shall be eligible to receive the same."

THE JOHN LINN PATTON SCHOLARSHIPS: Founded in 1903, with a principal of two thousand five hundred dollars, by Mr. and Mrs. William A. Patton, of Philadelphia, in memory of their son, John Linn Patton, of the Class of 1903.

THE ROBERT STOCKTON PYNE SCHOLARSHIP: Founded in 1904, with a principal of two thousand five hundred dollars, by Mrs. M. Taylor Pyne, of Princeton, in memory of her son, Robert Stockton Pyne and increased in 1921 to yield an annual stipend of two hundred and fifty dollars annually.

THE GEORGE BLACK REA SCHOLARSHIP; with a principal of two thousand five hundred dollars: Founded in 1908 by Mr. and Mrs. Samuel Rea, of Bryn Mawr, Pa., in memory of their son, George Black Rea, of the Class of 1904. Preference to be given to a student of the Department of Civil Engineering.

THE HOWARD FRANK ROTHSCHILD MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1921 in memory of Howard Frank Rothschild of that Class who died January 7, 1919.

THE ELIZABETH VAN CLEVE SCHOLARSHIP: Founded in 1886, by a gift of two thousand dollars, from Hon. Caleb S. Green, of Trenton, N. J., of the Class of 1837. In 1912 the principal was increased to two thousand five hundred dollars by William E. Green, of the Class of 1902.

The scholarship is ordinarily assigned to a student in the John C. Green School of Science.

THE WALLACE SCHOLARSHIPS; (two with an income of one hundred and twenty-five dollars each): In 1898 Mrs. R. H. Allen and Miss Wallace, of Newark, N. J., gave five thousand dollars to found two scholarships in memory of their father, William C. Wallace, of the Class of 1823, for the benefit of needy students.

ARTHUR L. WHEELER MEMORIAL SCHOLARSHIP: Founded in memory of Arthur Ledlie Wheeler, Class of 1896; to be

held four years and paying $500. a year during freshman and sophomore years, and $400. a year during junior and senior years; awarded to that entering candidate who in the opinion of the Scholarship Committee most nearly satisfies the qualifications required by the Rhodes Scholarships.

To these has been added by the Committee, a further requirement, namely, need of financial assistance, although the Scholarship is not limited to boys needing such assistance. For particulars apply to Dr. Charles Browne, Princeton, N. J.

THE JOHN WITHERSPOON SCHOLARSHIP; with an income of one hundred and sixty dollars: Founded in 1909 by the Trustees of the Witherspoon Memorial Association with a gift of four thousand dollars, the unexpended balance of a fund contributed by patriotic citizens for the purpose of erecting a statue in Washington, D. C., to President John Witherspoon.

THE WISTAR MORRIS WOOD AND CHARLES MORRIS WOOD SCHOLARSHIP: Founded in 1887, by a gift of two thousand dollars from the Rev. Charles Wood, D.D., of Washington, D. C. In 1908 the principal was increased to two thousand five hundred dollars by the donor. The annual stipend is one hundred and twenty-five dollars.

This fund shall ordinarily in the first instance be given to a member of the junior class, or in case no member of the junior class answers the conditions, then to any member of the lower classes answering them. Conditions: I. To any foreign missionary's son intending himself to become a foreign missionary; II. To any student proposing to labor in the foreign field; III. To any minister's son studying for the ministry. It shall be understood that the recipient of the fund must possess and keep up superior scholarship.

REGIONAL SCHOLARSHIPS

CALIFORNIA

THE WILLIAM P. AND MARGARET H. FULLER MEMORIAL SCHOLARSHIP: Founded in 1919 with a gift of ten thousand dollars by Mrs. Ella F. Brawner in memory of her parents and open to that entering candidate from the State of California who in the opinion of the Scholarship Committee most nearly satisfies the qualifications required by the Rhodes

Scholarships. For particulars apply to the Secretary of the University.

PRINCETON CLUB OF SOUTHERN CALIFORNIA REGIONAL SCHOLARSHIP: Awarded on the Rhodes Scholarship plan and paying $500. a year for four years. For particulars apply to Mr. D. S. Hammack, 419 American Bank Building, Los Angeles, California.

ILLINOIS

THE CLYDE M. CARR SCHOLARSHIP: Founded in 1920 by Mr. Clyde M. Carr, of Chicago, Ill., with a gift of six thousand dollars. Open to candidates from the State of Illinois, preferably of Cook County, who in the opinion of the Scholarship Committee of the Princeton Club of Chicago most nearly satisfy the qualifications required by the Rhodes Scholarship plan. For particulars apply to the Secretary of the University.

THE PRINCETON CLUB OF CHICAGO UNDERGRADUATE SCHOLARSHIP: Endowed by the Princeton Club of Chicago and open to men in Chicago and upper Illinois. The fund available is six hundred dollars for the four years of the undergraduate course, the holder being permitted to draw on the amount annually as his needs may require with the understanding that he will sign notes payable at his convenience after completing his course. Awards are made by a committee of the Princeton Club of Chicago.

[See also War Memorial Scholarships: The K. S. Goodman Scholarship.]

MINNESOTA

PRINCETON ALUMNI ASSOCIATION OF THE NORTHWEST SCHOLARSHIP: Founded in 1920 by the Princeton Alumni Association of the Northwest with a gift of five thousand dollars. Available to candidates from the states of Minnesota, North Dakota and South Dakota.

MISSISSIPPI

THE LAUREN E. ROGERS SCHOLARSHIP: Founded in 1920 by Mr. Wallace B. Rogers and his son Lauren E. Rogers of the Class of 1920, in memory of the latter's grandfather Lauren C. Eastman, but changed on the death of Lauren E.

Rogers in 1921 to a scholarship in his memory. Open to candidates from Mississippi. The stipend at present is five hundred dollars.

New Jersey

Princeton Alumni Association of Northern New Jersey Scholarship: Founded by the Association and open to residents of Bergen County, New Jersey, who appear before the Scholarship Committee of the Association. The income ($200) is available during freshman and sophomore years, and is awarded annually.

The William H. Thompson Scholarship: Founded in 1921 by Mr. William H. Thompson of Hightstown, N. J. with a gift of five thousand dollars, and open first to candidates who are citizens of Hightstown, N. J., and secondly to candidates who are citizens of Mercer County, N. J.

[See also War Memorial Scholarships: The R. G. Benson Scholarship, the N. R. Fiske Scholarship, and the Warden McLean Scholarship Fund.]

New York

New York and Vicinity Scholarship: Founded in 1918 by members of the Princeton Club of New York, and alumni of New York, Long Island and Westchester, and open to candidates from this region.

The stipend is $250 for four years, and is awarded by the Scholarship Fund Committee, under the Rhodes Scholarship plan.

For particulars apply to Mr. Joseph R. Truesdale, Chairman, 149 Broadway, New York City.

[See also War Memorial Scholarships: The W. C. Story Scholarship.]

North Dakota

See Minnesota: Princeton Alumni Association of the Northwest Scholarship.

Pennsylvania

The Harold Kimball Memorial Scholarship Fund: Founded in 1919 by Mr. Walter D. Kimball, Mr. W. Irving Kimball, Miss Grace L. Kimball, Miss Emily C. Richards

with a gift of five thousand dollars in memory of their brother, Harold Kimball of the Class of 1909.

The Scholarship is open to candidates from the schools of Philadelphia county or of the territory within a radius of twenty miles from the center of Philadelphia, who need the financial assistance.

The Scholarship is awarded by the Princeton Club of Philadelphia subject to the right of the University to designate some other method of selection.

For further particulars apply to Mr. T. Williams Roberts, 1644 Land Title Building, Philadelphia, Pa.

THE ALGERNON BROOKE ROBERTS MEMORIAL SCHOLARSHIP: Founded originally in 1909 by his mother, in accordance with a bequest from him of twenty-five hundred dollars, in memory of Algernon Brooke Roberts, of the Class of 1896. Increased in 1920 by gifts from members of his family to a total of twenty thousand dollars, to endow two scholarships open to candidates from the district of the Princeton Club of Philadelphia.

For further particulars apply to Mr. T. Williams Roberts, 1644 Land Title Building, Philadelphia, Pa.

[See also War Memorial Scholarships: The Benjamin Bullock III Scholarship Fund, The Warden McLean Scholarship Fund, the E. T. Van Dusen Scholarship, and the W. R. Beal Scholarship.]

THE CHARLES D. SPENCER SCHOLARSHIP: Founded by the Princeton Alumni Association of Erie, Pennsylvania, in memory of Charles D. Spencer, of the Class of 1908. The Scholarship, which pays to the holder the sum of $250 during his freshman year, is open to candidates residing in Erie County, Pennsylvania. The award is made by a committee appointed by the Princeton Alumni Association of Erie.

For particulars, apply to Mr. S. A. Sisson, Secretary, 409-10 Marine Bank Building, Erie, Pa.

THE JOHN A. MCGINLEY SCHOLARSHIP: Founded in 1916 from the residuary estate of Mr. John A. McGinley and contributions of friends. Open to candidates residing in the vicinity of Reading, Pa., who have qualified for admission to Princeton University, or who are already admitted and have shown satisfactory progress.

By the deed of gift, the committee of award must consist

of three Princeton alumni appointed by the President or the Trustees of Princeton University.

For particulars apply to Mr. Robert S. Birch, Principal of the High School for Boys, 8th and Washington Sts., Reading, Pa.

PRINCETON ALUMNI ASSOCIATION OF WESTERN PENNSYLVANIA SCHOLARSHIPS: Two scholarships, each paying $250 per year for four years, are open to members of the graduating class in accredited high and private schools within the territory covered by the Association, which in general embraces Western Pennsylvania. All awards are made on a competitive basis, after full investigation by the Scholarship Committee of the Association. Further information may be obtained from the Secretary, Mr. John G. Frazer, 747 Union Arcade, Pittsburgh, Pa.

THE WILLIAM TAYLOR SCHEIDE MEMORIAL SCHOLARSHIP FUND: Founded in 1920 by his family in memory of William Taylor Scheide of Titusville, Pa. Under the terms of this foundation scholarship aid of not less than $250 nor more than $500 annually will be awarded to each of the two candidates for the Freshman Class from the high schools of Titusville, Tidioute, Oil City, Warren, and Franklin, Pennsylvania.

Application for candidacy should be made to the Principal of the candidate's school.

SOUTH DAKOTA

See Minnesota: Princeton Alumni Association of the Northwest Scholarship.

TEXAS

THE NATHANIEL EWING MEMORIAL SCHOLARSHIP: Founded in 1919 by William K. Ewing, of the Class of 1904, in memory of his father, the Hon. Nathaniel Ewing, of the Class of 1869, with a gift of ten thousand dollars. Open to candidates from San Antonio, Texas, and to be held four years.

For particulars apply to the Secretary of the University.

TENNESSEE

See War Memorial Scholarships: The C. McG. Tyson Scholarship.

WAR MEMORIAL SCHOLARSHIPS

THE CAMPBELL ELIAS BABCOCK MEMORIAL SCHOLARSHIP: Founded in 1920 by Charles M. Jamison of the Class of 1891 with a gift of five thousand dollars, in memory of his classmate, Captain Campbell Elias Babcock, U. S. A., who died in service, June 21, 1917, at Winnetka, Ill.

THE RICE BASSETT WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1920 in memory of Quartermaster (second class) Rice Bassett of the Class of 1920, who was killed in line of duty October 9, 1918, in foreign waters. The annual income is two hundred dollars.

THE WILLIAM RODGERS BEAL MEMORIAL SCHOLARSHIP: Founded in 1920 by Mr. James H. Beal of Pittsburgh, Pa., with a gift of five thousand dollars, in memory of his son, Driver William Rodgers Beal, of the Class of 1918, who died in service in France, September 9, 1917, as a member of the American Red Cross Ambulance Service.

Open to candidates from the territory of the Princeton Alumni Association of Western Pennsylvania. Apply to Mr. John G. Frazer, 747 Union Arcade, Pittsburgh, Pa.

THE ALEXANDER BROWN BELL WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1921, in memory of Ensign Alexander Brown Bell of that Class who died in service at Portsmouth Naval Hospital October 25, 1918. The annual income is two hundred dollars.

THE ROBERT GRANGER BENSON MEMORIAL SCHOLARSHIP: Founded in 1919 with a gift of ten thousand dollars by Mr. R. D. Benson in memory of his son, Quartermaster Sergeant, Master Engineer (junior grade) Robert Granger Benson, of the Class of 1915, who died in service in France October 27, 1918.

Open to a graduate of any school in Passaic, New Jersey, and awarded by a Scholarship Committee selected by the founder. For particulars apply to the Secretary of the University.

THE ARTHUR BLUETHENTHAL SCHOLARSHIP: Founded with a bequest to the University of two thousand dollars from Pilote-Aviateur Arthur Bluethenthal, Croix de Guerre (2 citations), Class of 1913, who was killed in action in France, June 5, 1918. The bequest has been assigned as a Scholarship in his memory.

THE HAROLD KIDDER BULKLEY MEMORIAL SCHOLARSHIP: Founded in 1919 with a gift of five thousand dollars by Mr. Edwin M. Bulkley in memory of his son, Lieutenant Harold Kidder Bulkley, of the Class of 1919, who was killed in line of duty, in England, February 18, 1918.

THE BENJAMIN BULLOCK, III, MEMORIAL SCHOLARSHIP FUND: Founded in his memory in 1919 by friends of Lieutenant Benjamin Bullock, III, D. S. C., of the Class of 1916, who was killed in action in France, September 29, 1918.

The scholarship is open to candidates from the schools of Philadelphia county or of the territory within a radius of twenty miles from the center of Philadelphia, who need financial assistance. The Scholarship is awarded in accordance with the principles of the Rhodes Scholarship plan. The income for 1921-1922 is four hundred twenty-five dollars.

For further particulars apply to Mr. T. Williams Roberts, 1644 Land Title Building, Philadelphia, Pa.

THE LYMAN COLLINS BUTLER WAR MEMORIAL SCHOLARSHIP: Founded in 1919 with a gift of twenty-five hundred dollars by William Allen Butler of the Class of 1876, in memory of his son, Lyman Collins Butler, of the Class of 1910, who died in service June 20, 1917, in New York City.

THE PHINEHAS PROUTY CHRYSTIE WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by his parents, Dr. and Mrs. Walter Chrystie, and friends, in memory of Captain Phinehas Prouty Chrystie, of the Class of 1912, who was killed in line of duty at Fort Sill, Oklahoma, February 6, 1918. The income for 1921-1922 will be three hundred and twenty-five dollars.

THE TINGLE W. CULBERTSON MEMORIAL SCHOLARSHIP: Founded with a bequest of five thousand dollars from Lieutenant Tingle W. Culbertson, Class of 1911, who was killed in action in France, October 1, 1918. The bequest has been assigned as a scholarship in his memory.

THE WELLS BRADLEY CUMINGS WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1921 in memory of Wells Bradley Cumings of that Class, who died in France, June 30, 1918, of wounds received in action. The annual income is two hundred dollars.

THE GEORGE WILLIAM DELL WAR MEMORIAL SCHOLARSHIP: Founded in 1920, by the Class of 1920 in memory of George

William Dell of that Class, who died in France, May 20, 1918, of wounds received in action. The annual income is two hundred dollars.

THE HENRY SIDNEY EHRET, JR., WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1920 in memory of Lieutenant Henry Sidney Ehret, Jr., of that Class, who died in service at Miami, Florida, December 31, 1918. The annual income is two hundred dollars.

THE EDWARD ELSWORTH, JR., WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1911 in memory of Lieutenant Edward Elsworth, Jr., D. S. C., of that Class, who was killed in action in France, October 20, 1918. The annual income is two hundred dollars.

THE SAMUEL WEBSTER ELWOOD WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1920 in memory of Cadet Samuel Webster Elwood, who died in service at Fort Chelsea Naval Hospital, September 10, 1918. The annual income is two hundred dollars.

THE NEWELL RODNEY FISKE WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by his father, Mr. H. N. Fiske, and friends, in memory of Captain Newell Rodney Fiske, D. S. C., of the Class of 1918, who was killed in action in France July 15, 1918.

In awarding the scholarship preference is given first to candidates from the Cranford, N. J., High School, secondly to candidates from the Pingry School, Elizabeth, N. J., and thirdly to candidates from any school in New Jersey. The scholarship is awarded on the general principles of the Rhodes Scholarship plan. The income for 1921-1922 is four hundred dollars. For particulars apply to Mr. Dean Mathey, Cranford, N. J.

THE GILBERT ROBERTSON GLORIEUX WAR MEMORIAL SCHOLARSHIP: Founded in 1920 with a gift of five thousand dollars from his mother, Mrs. W. L. Glorieux, and his sisters, Miss Susan Glorieux and Mrs. Jean Glorieux Drake, in memory of Private Gilbert Robertson Glorieux, of the Class of 1917, who died in service at Camp Taylor, Ky., October 13, 1918.

THE KENNETH SAWYER GOODMAN MEMORIAL SCHOLARSHIP: Founded in 1920 with a gift of ten thousand dollars by

Mr. and Mrs. William O. Goodman in memory of their son, Lieutenant (senior grade) Kenneth Sawyer Goodman, of the Class of 1906, who died in service, November 30, 1918, at Chicago, Ill.

Awarded preferably to condidates from Chicago, Ill., and then to candidates from the West.

THE HAROLD IMBRIE WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1900 in memory of Lieutenant Harold Imbrie of that Class, who died in service at Wichita Falls, Texas, April 24, 1918.

THE DOUGLAS MARSHALL LITTLETON WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1921 in memory of Douglas Marshall Littleton of that Class, who died in the diplomatic service in France, January 2, 1919. The annual income is two hundred dollars.

THE SCOTT HARRISON LYTLE WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1911 in memory of Private Scott Harrison Lytle of that Class, who was killed in action in France, September 29, 1918. The annual income is two hundred dollars.

THE WILLIAM LEONARD MCEWAN, JR., WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1920 in memory of Lieutenant William Leonard McEwan, Jr., of that Class, who died in service at Pittsburgh, Pa., January 13, 1919. The annual income is two hundred dollars.

THE WARDEN MCLEAN SCHOLARSHIP FUND: Founded in 1919 with a gift of thirty thousand dollars by Mr. William L. McLean in memory of his son, Lieutenant Warden McLean of the Class of 1912, who was killed in line of duty at Fort Oglethorpe, Ga., June 29, 1917.

The Fund is established in remembrance not only of Lieutenant McLean's "sterling manhood, the courage of his patriotic instinct and his fine sense of duty, but also of his helpful and sympathetic disposition toward other men in all walks of life." It is to be used "to assist men of like character and aims in obtaining an education at Princeton University."

The method of selecting the beneficiaries, the amounts to be awarded to any one student in a given year, and all terms and conditions under which this assistance is to be tendered, are to be determined by the University.

Applicants must come from schools in Pennsylvania and

New Jersey, preference normally being given to applicants from schools in Philadelphia County or of the territory within thirty miles from the center of the City of Philadelphia.

The scholarships are awarded "in accordance with the general principle that qualities of character, leadership, physical fitness, and general ability shall be considered as well as proficiency in studies."

For further information apply to the Secretary of the University.

THE GEORGE NORTON MILLER, JR., MEMORIAL SCHOLARSHIP: Founded in 1919 with a gift of five thousand dollars, by Dr. George Norton Miller, in memory of his son, Lieutenant George Norton Miller, Jr., of the Class of 1910, who died in service in Germany, (American Army of Occupation) March 27, 1919.

THE MARSHALL PHILO MILLER WAR MEMORIAL SCHOLARSHIP: Founded in 1920, by the Class of 1911, in memory of Private Marshall Philo Miller, of that Class, who was killed in action in France, October 10, 1918. The annual income is two hundred dollars.

THE WISTAR MORRIS MEMORIAL SCHOLARSHIP: Founded in 1920, with a gift of five thousand dollars, by his friends, in memory of Lieutenant Wistar Morris, of the Class of 1919, who was killed in action in France, September 29, 1918.

THE MICHAEL THOMAS O'DONAGHUE WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1911 in memory of Private Michael Thomas O'Donaghue, of that Class, who was killed in action in France, October 4, 1918. The annual income is two hundred dollars.

THE FRANKLIN PERRY WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1911 in memory of Lieutenant Franklin Perry, of that Class, who died in service in France, December 29, 1917. The annual income is two hundred dollars.

THE EDWARD CUTHBERT PLATT, JR., WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1901 in memory of Lieutenant Edward Cuthbert Platt of that Class, who was killed in action in France, November 7, 1917. The annual income is two hundred dollars.

THE JOHN PRENTISS POE MEMORIAL SCHOLARSHIP: Found-

ed in 1920 by the Class of 1895 with a gift of five thousand dollars in memory of Corporal John Prentiss Poe of the Black Watch and a member of the Class of 1895, who was killed in action in France, September 25, 1915.

THE JAMES JACKSON PORTER MEMORIAL SCHOLARSHIPS: Two scholarships founded with a gift of ten thousand dollars by Mr. William H. Porter in memory of his son, Lieutenant James Jackson Porter, of the Class of 1911, who was killed in action in France, October 5, 1918.

THE WILLIAM CLARKSON POTTER SCHOLARSHIP: Founded with a gift of five thousand dollars by Mrs. Frederick Allien, in memory of her nephew, Lieutenant William Clarkson Potter, D. S. C., Croix de Guerre, of the Class of 1919, who was killed in action in France, October 10, 1918.

THE SAMUEL JACKSON REID, JR., MEMORIAL SCHOLARSHIP FUND: Founded in 1919 in his memory by the classmates and friends of Lieutenant Samuel Jackson Reid, Jr., President of the Class of 1906, who was killed in action in France, August 22, 1918.

The Samuel J. Reid Scholarships are four in number, one to each college class, awarded on the general principles of the Rhodes Scholarships, to perpetuate the memory of Lieutenant Reid's "virility and all-round manhood by aiding men of his type to acquire the benefits of a college education."

The Fund is managed and the Scholarships are awarded by a board of seven trustees. For further particulars address Mr. S. C. Etherington, Secretary of the Trustees, The Samuel Reid, Jr., Memorial Scholarship Fund, 50 East 42nd St., New York City.

THE ARTHUR VANDERVOORT SAVAGE MEMORIAL SCHOLARSHIP: Founded in 1920 with a gift of eleven thousand dollars, by his family, in memory of Lieutenant Arthur Vandervoort Savage, D. S. C., Croix de Guerre, of the Class of 1917, who was killed in action in France, July 16, 1918.

THE WILLIAM CLINTON STORY MEMORIAL SCHOLARSHIP: Founded in 1920 with a gift of five thousand dollars by Mr. and Mrs. Fred E. Story in memory of their son, Cadet William Clinton Story of the Class of 1913, who was killed in line of duty, February 26, 1918, at Park Field, Memphis, Tenn.

Open to candidates from the Schools of Nassau County, N. Y., preferably those of Freeport, N. Y.

THE WILLIAM STRONG WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1911 in memory of Lieutenant William Strong of that Class, who died at Pasadena, California, December 21, 1919, from the effects of gas received in action in France, March 1917. The annual income is two hundred dollars.

THE CHARLES MCGHEE TYSON MEMORIAL SCHOLARSHIP: Founded with a gift of ten thousand dollars by Mrs. Charles McG. Tyson in memory of her husband, Lieutenant (junior grade) Charles McGhee Tyson, Class of 1912, who was killed in line of duty at sea, October 11, 1918. Open preferably to candidates from Tennessee.

THE EDWIN THORP VAN DUSEN MEMORIAL SCHOLARSHIP: Founded with a gift of ten thousand dollars by the relatives of Lieutenant Edwin Thorp Van Dusen of the Class of 1915, who was killed in action in France, September 20, 1918.

The Scholarship is awarded by the Princeton Club of Philadelphia, in accordance with the general principles of the Rhodes Scholarships, preferentially to applicants who are either nephews or first cousins of Lieutenant Van Dusen, and in the absence of such applicants, to candidates from the schools of Philadelphia County.

For further particulars apply to Mr. T. Williams Roberts, 1644 Land Title Building, Philadelphia, Pa.

THE FREDERICK IRWIN WAAGE WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1900 in memory of Major Frederick Irwin Waage, of that Class, who died in service at Fort Bliss, Texas, October 31, 1918.

THE GALBRAITH WARD AND MARQUAND WARD MEMORIAL SCHOLARSHIPS: Founded with a gift of ten thousand dollars by Mrs. Roderick Terry, Mrs. Harold Godwin, Mrs. Alan Fullerton, Mrs. J. Seymour Mellor, Mr. Henry Marquand and Mr. Allan Marquand in memory of Sergeant Galbraith Ward, of the Class of 1915, who died in service in France, December 17, 1918, and of his brother, Corporal Marquand Ward, of the Class of 1917, who was killed in action in France, October 18, 1918.

THE ROBERT RUDD WHITING MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1901 in memory of Robert Rudd Whiting of that Class, who died in civilian war ser-

vice, October 15, 1918. The annual income is two hundred dollars.

THE COLEMAN HAWLEY WILLIAMS WAR MEMORIAL SCHOLARSHIP: Founded in 1920 by the Class of 1921 in memory of Private Coleman Hawley Williams of that Class, who died in service at Fort Sam Houston, Texas, March 31, 1918. The annual income is two hundred dollars.

WAR MEMORIAL PRIZE SCHOLARSHIPS

The plans of the University to commemorate the one hundred and forty-nine Princetonians who fell in the World War, included the founding of scholarships in their names.

Several such scholarship foundations having been created by private and class gifts, in completion of the plan the University offers thirty competitive Memorial Prize Scholarships for the year 1921-1922, open to candidates for the Freshman Class. These scholarships will be held by the winners during their college course, provided they satisfy the University regulations as to standing and conduct governing holders of scholarships.

Each Memorial Prize Scholarship will have an annual value of $200. This sum may be increased to the amount of the entire tuition fee if the candidate satisfies the Secretary of the University that he needs financial assistance.

The awarding committee is the Secretary, the Executive Secretary, and the Registrar of the University.

Awards will be announced each summer as soon after the June entrance examinations as possible. They will be made on the basis of

(a) the general principles of the Rhodes Scholarships plan, such as general ability, qualities of leadership, Christian character, etc.
(b) school record, and
(c) record made at the June entrance examinations.

Application consists in filing with the Secretary of the University, or with the chairman of the district to which the candidate's school belongs, a qualification blank signed by the principal of the candidate's school. This must be filed on or before April 1.

The district chairmen and their districts are:

1. Warren P. Hosmer, 57 Strathmore Rd., Brookline, Mass., for the district of New England;

2. S. Hinman Bird, 127 E. 64th St., New York City, for the district of New York State;
3. L. G. Payson, 68 Linden Ave., Englewood, N. J., for the district of New Jersey;
4. Charles T. Larzelere, Norristown, Pa., for the district of Eastern Pennsylvania, including Delaware;
5. John Frazer, Union Arcade, Pittsburgh, Pa., for the district of Western Pennsylvania;
6. A. B. Duvall, Hibbs Bldg., Washington, D. C., for the district of the Potomac, including Maryland, District of Columbia, and Virginia;
7. Robert H. Jones, Jr., 809 Citizens & So. Trust Co., Atlanta, Ga., for the district of the South, including North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee and Mississippi;
8. Gordon S. Rentschler, Hamilton, Ohio, for the Middlewestern District, including Ohio, West Virginia, Kentucky, Indiana and Michigan;
9. Robert H. Rice, 124 West Lake St., Chicago, Ill., for the district of Chicago, including Illinois, Wisconsin, and Iowa;
10. William C. Motter, 726 Merchants Bank Bldg., St. Paul, Minn., for the Northern district, including Minnesota, North and South Dakota;
11. Gilbert E. Faeth, The Faeth Co., Kansas City, Mo., for the district of St. Louis, including Missouri, Kansas, Nebraska, and Askansas;
12. L. R. Kendrick, 801 16th St., Denver, Colo., for the Rocky Mountain district, including Colorado, Wyoming, Montana, Utah, and New Mexico;
13. Charles Donahoe, 824 36th Ave., No., Seattle, Wash., for the Northwestern district, including Oregon, Washington, and Idaho;
14. D. S. Hammack, 419 American Bank Bldg., Los Angeles, Cal., for the Pacific district, including California, Nevada and Arizona;
15. John M. Bennett, Jr., 315 St. Mary's Street, San Antonio, Texas, for the Southwestern district, including Texas, Oklahoma and Louisiana.

For further information apply to the *Secretary, Princeton University, Princeton, N. J.*

FUNDS FOR CANDIDATES FOR THE MINISTRY

THE RICHARDS FUND: A bequest of Mrs. Esther Richards, of New York, amounting to $2,970.32, for the benefit of candidates for the ministry. Received in 1790.

THE LESLIE FUND: A bequest of James Leslie, of New York, of the Class of 1759, amounting to $10,677.49, for "the education of poor and pious youths with a view to the ministry of the Gospel in the Presbyterian Church." Received in 1792.

THE HODGE FUND: A bequest of Hugh Hodge, of Philadelphia, of a house and lot on Market Street, above Second (No. 205) "to be held by the Trustees in trust, to lease out from time to time, and the rents to be applied to the support and education of pious youths for the ministry." Received in 1805.

For application blanks for aid from the funds for candidates for the ministry apply to the *Secretary, Princeton University, Princeton, N. J.*

CHARITABLE FUNDS

THE VAN ARSDALE FUND: A bequest of Robert Van Arsdale, of Newark, N. J., of the Class of 1826, amounting to $3,000, "in trust for promoting charitable instruction in the College of New Jersey, according to the discretion of the Faculty." Received in 1875.

Applications for aid from the Van Arsdale Fund should be made to Professor Howard McClenahan, Dean of the College.

BUREAU OF APPOINTMENTS AND STUDENT EMPLOYMENT

The University has always assisted a large number of students of limited means to reduce their expenses. In addition to the system of scholarships and remission of tuition already described, the Bureau of Appointments and Student Employment is organized in the Office of the Secretary to act as a general clearing house for undergraduate remunerative employment, and to control all enterprises by which self-supporting students are aided. It keeps a record of the earnings of such men and this index of earning capacity is used in placing students in favorable business or teaching positions

on graduation. The Bureau also seeks to find temporary positions for registered men during the Christmas and summer vacation.

Naturally, the first year is the most difficult one for the new and unskilled student who is dependent in part or in whole on his own resources. As he becomes better acquainted however he learns how to turn his experience to good account. The Bureau meanwhile endeavors to put him in the way of securing work that he is able to do, or to give him a position as waiter in the Dining Halls by which his board bill may be materially reduced.

The number of positions in the Dining Halls is limited, and in selecting waiters first preference is necessarily given to men who have been in the University one or more years. Of the entering men, those admitted in June and who are to receive remission of tuition or scholarships are given preference over those admitted in September and those not applying for remission of tuition or a scholarship.

All applicants for remission of tuition or for scholarships must register in the Bureau of Appointments, and no position will be given without this registration.

A booklet describing various forms of student employment and the general system of financial aid may be obtained on application to the Office of the Secretary. For further information apply to the *Director, Bureau of Appointments and Student Employment, Office of the Secretary, Princeton, N. J.*

PART IX

GRADUATE SCHOOL
SCHOOL OF ELECTRICAL ENGINEERING
SCHOOL OF ARCHITECTURE

THE GRADUATE SCHOOL

THE affairs of the Graduate School are administered by a committee of the University Faculty known as the Faculty Committee on the Graduate School. The Dean of the Graduate School is Chairman of this committee. All inquiries should be addressed to Professor West, Dean of the Graduate School.

The office of the Graduate School is in the west wing of Nassau Hall. Mrs. A. B. Creasey, Office Secretary of the Graduate School, is in attendance during office hours.

Applicants who possess a bachelor's degree from Princeton University, or from other institutions maintaining a similar standard in distinctively liberal studies for the bachelor's degree, may be admitted to the Graduate School subject to the following regulations:

1. Admission on diploma to the Graduate School is granted to bachelors of Princeton University whose standing for the undergraduate course is within the first three General Groups. A bachelor of lower standing may not be admitted unless his average standing in undergraduate studies in the department of his proposed graduate work is higher than the Third Group.

2. The equivalent of this standard is expected of applicants holding the bachelor's diploma from other colleges and universities.

3. In every case the further question of eligibility for a higher degree will be determined by the academic record of the applicant and his ascertained ability to pursue graduate studies.

No officer of instruction in the University, except an assistant or instructor on part-time appointment, or an instructor or assistant who has already fulfilled the requirements as to residence prior to his appointment as instructor, may be a candidate for any degree. The minimum residence requirement for the higher degrees will ordinarily be increased at the discretion of the Committee on the Graduate School, in the case of instructors or assistants on part-time appointment.

Regular students, except Juniors, in Princeton Theological

Seminary, who have maintained an average standing not lower than second group in Princeton Theological Seminary and who are recommended by the Faculty of that institution may be admitted as students of the Graduate School. On special recommendation a Junior of exceptional scholarly merit may be admitted as a graduate student at the beginning of the Second Term of the University. Graduate students thus enrolled who maintain an average standing of not less than second group in the regular course of Princeton Theological Seminary may proceed to the Master's degree if they satisfy the requirements of the University for the degree.

All graduate students, whether graduates of Princeton or of another institution, are required to apply for admission at the office of the Dean of the Graduate School before October first of each year, and those who present themselves for the first time must submit to the Dean their diplomas and such other credentials as may be required.

Immediately after admission every graduate student, including graduate students of the previous year, shall register and report his courses at the office of the Dean of the Graduate School.

FEES

Graduates of universities other than Princeton are required to pay the Treasurer a matriculation fee of five dollars. A diploma fee of ten dollars is charged every graduate student coming up for a higher degree. Every graduate student on full time, except holders of Fellowships or Graduate Scholarships, is required to pay an annual tuition fee of one hundred dollars. Every graduate student on part time, except part-time instructors or assistants in Princeton University and students in Princeton Theological Seminary, is required to pay an annual tuition of forty dollars.

In accordance with a reciprocal arrangement between the University and Princeton Theological Seminary, duly qualified students of either institution are admitted without charge for tuition to the privileges of the other.

No charge for laboratory fees is made to graduate students, but if any Department controlling a laboratory desires to charge for expenses and certifies its desire to the Treasurer, a deposit, the amount of which is to be fixed by the Depart-

ment concerned, will be required to cover in whole or in part the expense incurred for supplies (subject to rebate in case the actual expense is less than the amount of the deposit).

DEGREES

The following degrees are given for graduate study: Master of Arts, Master of Fine Arts, and Doctor of Philosophy.

Master of Arts

The degree of Master of Arts may be conferred only upon those holding a bachelor's degree in the liberal arts and sciences from this or another approved college who shall also have devoted at least one year exclusively to resident graduate study in the University under the care of the Faculty, passing examinations upon the subjects pursued; or who shall have taken graduate courses in the University involving at least three hours a week each term for two consecutive years and passed satisfactory examinations upon these courses, and on such extra reading as may be assigned. Save as above provided for, every candidate for the Master's degree is expected to pursue concurrently three graduate courses throughout at least one year, unless another arrangement is permitted by the Faculty Committee on the Graduate School. The courses shall be such as to form a consistent and well-coördinated body of studies, and shall be subject to the approval of the Faculty Committee on the Graduate School.

Master of Fine Arts

Duly qualified graduate students who have taken the degree of Bachelor of Arts in Princeton University or its definite equivalent elsewhere may proceed to the degree of Master of Fine Arts on satisfactorily completing the graduate studies prescribed for that degree. The words "in architecture" will be inserted in the diploma of those who have prepared themselves to become practicing architects by meeting the requirements of the School of Architecture.

Doctor of Philosophy

Subject to the regulations hereinafter stated, the degree of Doctor of Philosophy may be conferred upon any bachelor of Princeton University, or of another approved institution, pro-

vided he has spent at least two years exclusively in study for the degree. It should be clearly understood that two years is the minimum period required and that in all but the rarest cases three years will be found necessary. One year must be devoted exclusively to graduate study or research in residence at Princeton.

Regulations

Subjects of Study. An applicant for the degree of Doctor of Philosophy chooses one of the following subjects of study:

Philosophy	English
History	Mathematics
Politics	Astronomy
Economics	Physics
Art and Archaeology	Chemistry
Classics	Biology
Romanic Languages	Geology
Germanic Languages	Psychology

The examination for the degree of Doctor of Philosophy consists of two parts, known as the First Part and the Second Part.

Before offering himself for the first Part of the examination for the Doctor's degree the applicant is expected to have acquired a broad, general knowledge of the subject which he has chosen and a comprehensive and detailed knowledge of some one main division of it. In certain cases, however, the applicant may, on the recommendation of the Department in which his subject lies and with the approval of the Faculty Committee on the Graduate School, substitute for a main division of his subject a like division of a germane subject; or he may be required to take additional work outside his subject.

Applicants for the Doctor's degree are also required to take at some time during their period of graduate study a series of public lectures on the general trend of philosophical and scientific thought, to be given, with assigned collateral reading, by a member of the Department of Philosophy.

The First Part of the Examination. The First Part of the examination for the Doctor's degree is designed to test the student's mastery of his subject of study and is to be held not earlier than toward the close of the second year of graduate study. This examination may be written or oral, or both, at the discretion of the Department which gives the examination.

No applicant for the degree of Doctor of Philosophy is to

be enrolled as a candidate until he has satisfactorily sustained the First Part of the examination for the Doctor's degree as described above, and has shown that he is able to use French and German as instruments of research.

In case the First Part of the examination for the Doctor's degree is not sustained, the applicant may be allowed by permission of the Committee on the Graduate School to present himself for a second trial after the lapse of at least one academic term. If this second trial is unsatisfactory, no further examination will be allowed.

A student who has sustained the First Part of the examination for the Doctor's degree is entitled thereby to be recommended for the degree of Master of Arts.

The Thesis. After the applicant has sustained the First Part of the examination and has been enrolled as a candidate for the Doctor's degree he shall present to the Department in which his work chiefly lies a thesis on some topic in the special field of his study.

The Second Part of the Examination. When the thesis has been accepted by the Department, as giving evidence of high attainment and the power of independent research, the candidate proceeds to the Second Part of the examination for the Doctor's degree. This is a public oral examination in the field of the thesis and the more comprehensive aspects of the subject of study, and may not be divided.

Granting of the Degree. The Doctor's degree will be granted only after the first Part of the examination for the Doctor's degree has been sustained, the thesis accepted, the Second Part of the examination for the Doctor's degree sustained, and arrangements for publication of the thesis completed by the candidate and approved by the Committee on the Graduate School.

One hundred copies of the printed thesis must be deposited in the University Library.

THE GRADUATE COLLEGE

The buildings of the Graduate College consist of Thomson College, the gift of the late Mrs. J. R. Thomson Swann; Procter Hall, the gift of William Cooper Procter, of the Class of 1883, in memory of his parents; Pyne Tower, the gift of M. Taylor Pyne, of the Class of 1877; Wyman House, con-

tributed by the Estate of Isaac C. Wyman, of the Class of 1848; and the Cleveland Memorial Tower in memory of President Grover Cleveland (hon. 1897), erected out of popular contributions collected by the Cleveland Monument Association.

The endowments of the Graduate College include the fellowship fund of $300,000 given by Mr. Procter and the bequests under the will of Mr. Wyman.

Residence in the Graduate College

The Graduate College buildings provide a suitable place of residence for graduate students, where they have the full advantage of a common life in scholarly surroundings. The prices of residence have been fixed at a minimum cost, so that it is possible to live there for less than the amount which would usually have to be paid in the village of Princeton. Certain rooms will be reserved particularly for the Jacobus and Procter Fellows, and the other Fellows are expected ordinarily to reside in the building. Rooms at minimum prices will be reserved for students who do not hold fellowships. The capacity of the building is 113 students.

All applications for admission to residence in the building of the Graduate College should be addressed to the *Dean of the Graduate School, Princeton University, Princeton, New Jersey.* Application blanks will be forwarded on request.

A deposit of ten dollars should accompany each application in the form of a cheque, New York draft, or money order made payable to the *Treasurer of Princeton University.* This deposit will be credited against the student's bill for residence. In case the application is not granted, this deposit of ten dollars will be refunded, but will not be returned in case the application is granted, except as above stated.

Application for residence may be made at any time. So far as practicable, the rooms will be assigned in the order of application and in the order of preference indicated on the application blank. Subsequent changes of rooms will be allowed for good reasons, whenever possible. *Unless otherwise definitely arranged, the reservation of rooms is for one academic year of thirty-six weeks, including the Thanksgiving Recess and the Easter Recess, but not including the Christmas Vacation.*

In case of extended absence or withdrawal from residence in the Graduate College, requests for deductions are to be made to the Treasurer of the University. No deductions are made for temporary absence.

The prices charged for residence in the Graduate College include furnished rooms, light, heat, attendance, and board, but not personal laundry. The rooms are divided into six groups, with the following present total charges to graduate students and assistants for the academic year of thirty-six weeks:

Group I		$420.00
Group II		440.00
Group III		460.00
Group IV		480.00
Group V	Double	480.00
	Single	530.00
Group VI	Double	520.00
	Single	560.00
Group VII		620.00

The average weekly residential cost to the student thus ranges from $11.66 to $17.22. These charges for residence are subject to change on notice given to that effect. One person occupying a double suite alone is charged two-thirds of the price for two occupants. Arrangements for members of the faculty who desire to reside in the Graduate College, are made at an advance over the graduate students' rates.

Graduate students rooming outside may be admitted to the table and other privileges of the Graduate College, except residence, at a charge of $320.00 for the academic year. Graduate students of the University who are not at the table nor resident in the buildings are invited to avail themselves of the other privileges of the Graduate College.

FELLOWSHIPS

Unless otherwise specifically stated, every Fellowship and Graduate Scholarship is awarded by the Faculty.

I. UNIVERSITY FELLOWSHIPS

These fellowships are intended to encourage advanced study and research in the several departments to which they are assigned. They are distinguished from the college fellowships by being open to the duly qualified graduates of any college, while the appointments are made, not by competitive examination, but by a comparison of the records presented by the applicants as to their previous collegiate standing, capacity, and character.

The University fellowships are subject to the following regulations:

1. A Fellow must devote himself to study under the direction of the department in which the fellowship is provided.
2. A Fellow is not ordinarily permitted to give private tuition.
3. The fellowships are to be held for one year, but in cases of special merit they may be continued for a longer period.
4. All requests for fellowship or scholarship application blanks shall be addressed to the Dean of the Graduate School and all applications should be in the hands of the Dean of the Graduate School on or before March 1, the appointees to hold their positions for a year from the following September. Applications received later than March 1 may be considered in special cases, and to fill vacancies.

CLASSES OF UNIVERSITY FELLOWSHIPS

The University Fellowships are divided into two classes, the advanced and the ordinary.

The advanced fellowships include the Jacobus Fellowship and the ten Procter Fellowships. They have an annual stipend of eleven hundred dollars each, exempt from charge for tuition, and are assigned only to graduate students of at least one year's standing who have given evidence of unusual ability in their graduate work and capacity to engage successfully in research. There is also the American-Scandinavian Travelling Fellowship, with a stipend of fifteen hundred dollars.

The ordinary fellowships regularly have a stipend of six hundred dollars each, exempt from charge for tuition. The number of these fellowships is approximately thirty and varies slightly from year to year.

ADVANCED FELLOWSHIPS

Porter Ogden Jacobus Fellowship

Established in 1905 by the generosity of Mrs. Clara Cooley Jacobus. This fellowship will be conferred upon that regularly enrolled student of the Graduate School who, in the judgment of the University Faculty, shall have evinced the highest scholarly excellence in his graduate work during the year. The appointee to this fellowship receives the income from an endowment of $25,000 and is expected to devote himself exclusively to study under the direction of the Faculty.

The Charlotte Elizabeth Procter Fellowships

These fellowships are established on an endowment of three hundred thousand ($300,000) dollars, given in memory of Charlotte Elizabeth Procter by her son. The terms of the fellowships are as follows:

1. The fellowships shall be known as The Charlotte Elizabeth Procter Fellowships, and the holders thereof shall be exempt from tuition fees.

2. The fellowships are open only to unmarried men who are graduates of not more than six years' standing and who hold the bachelor's degree in distinctively liberal studies from Princeton University or from some other institution maintaining a similar standard for the bachelor's degree.

3. Appointment is to be made by vote of the University Faculty on nomination by the Dean of the Graduate School after consultation with the full professors in the department interested.

4. The tenure of each fellowship is one academic year, subject to re-appointment of not more than two years longer, except on evidence of extraordinary ability and upon unanimous vote of the University Faculty.

5. The fellowships are not to be allocated to separate departments but are open to all the departments conducting graduate work in the liberal arts and sciences.

6. Every Fellow appointed on this Foundation shall reside in the buildings of the Graduate College, unless dispensed therefrom by the Dean of the Graduate School, and shall tevote himself to advanced study to the exclusion of tutoring, teaching, lecturing or any other occupation or employment.

7. In case the conduct or work of any Fellow is unsatisfactory, the tenure of his fellowship may be terminated by the University Faculty.

8. The stipend of each fellowship shall be one thousand ($1,000.00) dollars annually, and no fellowship may be divided.

9. The income of the Foundation is to be applied to maintaining as many fellowships, each yielding one thousand ($1,000.00) dollars annually, as eighty per cent of the income will warrant. All income in excess of eighty per cent shall be applied first, to maintaining the principal of the Foundation, and then to re-investment for the purpose of increasing the stipend of the fellowships in amounts of one hundred ($100.00) dollars each, as rapidly as eighty per cent of such re-investment will permit.

PROVIDED, HOWEVER, that whenever the stipend of such fellowships amounts to fifteen hundred ($1,500.00) dollars each per year, thereafter no further increase in the stipend shall be made, but additional fellowships of fifteen hundred ($1,500.00.) dollars shall be founded as rapidly as said eighty per cent of such re-investment will allow. All excess of income remaining at the end of each fiscal year is to be applied to the increase of the capital fund.

AMERICAN SCANDINAVIAN TRAVELLING FELLOWSHIP

Founded in 1920 by Henry Goddard Leach, of the Class of 1903, for a period of four years, beginning 1921-1922. The stipend is $1500 annually.

In 1921 the nominations are to be made before February 1 by the American Scandinavian Foundation in Denmark and Norway, the final selection to be made by the President of Princeton University.

In 1922 the President of Princeton University is to make nominations before March 1 from among the graduates of Princeton University, the final selection to be made by the Fellowships Jury of the American Scandinavian Foundation.

This alternating procedure is to be followed in succeeding years.

ORDINARY FELLOWSHIPS

J. S. K. Mathematical Fellowship Fund.—This fund was founded in 1873 by a resident of New York City. In accordance with the deed of gift, the income from this fund is to be "used exclusively for University fellowships in the Department of Mathematics." One Fellow in mathematics will be appointed each year. Frequently a second Fellow may be appointed. Appointments will be made on the basis of the records presented by the applicants as to their previous collegiate standing, capacity, and character. In addition, in the case of resident students, a competitive examination may be held in June on geometry, differential equations, and the theory of functions.

South East Club University Fellowship in Social Science.—This fellowship was founded by alumni of the Classes of 1876, 1877, 1878, and 1879, former residents of the South Entry of East College.

Class of 1877 University Fellowship in Biology.—This fellowship was endowed by the Class of 1877.

Charles Scribner University Fellowship in English Literature.—This fellowship was founded in memory of Charles Scribner, of the Class of 1840, by his son, Charles Scribner, of the Class of 1875.

Thaw Fellowship in Astronomy.—This fellowship was founded by Mrs. William Thaw.

John Harding Page Classical Fellowship.—This fellowship was established in 1900 by Mrs. James Laughlin, Jr., as a memorial to her father, Mr. John Harding Page.

Francis Hinton Maule Biological Fellowship.—This fellowship was founded in 1901 by Mr. and Mrs. Francis I. Maule as a memorial to their son, Francis Hinton Maule, who was a student in the University during the years 1895-1898.

Class of 1860 Experimental Science Fellowship.—This fellowship was founded in 1870 by the Class of 1860. A deficiency of income, resulting from the depreciation of the value of the securities in which the principal was invested and the lowering of the rate of interest, is paid, by the consent of the donor, from the income of the Magee Professorship of

Mining and Engineering, founded by George J. Magee, of the Class of 1860. By action of the Board of Trustees, taken in 1904, this fellowship was constituted a University Fellowship to be administered, under the regulations governing the administration of such fellowships, by the Departments of Physics and Chemistry.

HARVARD FELLOWSHIP IN CHEMISTRY.—Founded in 1905 by the generosity of one of the Fellows of Harvard University.

GORDON MACDONALD FELLOWSHIP.—This fellowship, at present unassigned to any department, was established in 1908 by Mr. James Speyer as a memorial to his friend and partner, Gordon Macdonald.

BOUDINOT HISTORICAL FELLOWSHIP.—This fellowship, founded in part upon a bequest of Dr. Elias Boudinot, of New Jersey, was constituted a University Fellowship in 1909.

BOUDINOT MODERN LANGUAGE FELLOWSHIP.—This fellowship, founded in part upon a bequest of Dr. Elias Boudinot, of New Jersey, was constituted a University Fellowship in 1909.

CLASS OF 1883 UNIVERSITY FELLOWSHIPS.—In June, 1910, the Class of 1883 contributed the sum of $30,000 to establish two University Fellowships with an income of not less than $600 each; the two fellowships to be awarded by preference in the Departments of Politics, Physics, Chemistry, Biology or Geology.

HERBERT MONTGOMERY BERGEN FELLOWSHIP IN MODERN LANGUAGES.—This fellowship was founded in 1920 by the will of Mr. George Spafford Bergen, in memory of his son, Herbert Montgomery Bergen of the Class of 1895. In exceptional cases this Fellowship may be made an Advanced Fellowship with the corresponding stipend.

II. COLLEGE FELLOWSHIPS

The following College Fellowships are open to duly qualified members of the graduating class of Princeton University:

Only academic seniors who are candidates for a bachelor's degree are admitted to the competition for these fellowships, and no one is admitted to such competition who has failed to pass satisfactorily his last preceding examination in any of the departments.

No member of any class is allowed to compete for more than one of the fellowships offered to that class.

Every competitor must have been a member of the University in full standing for at least two academic years previous to the fellowship examinations.

CHANCELLOR GREEN MENTAL SCIENCE FELLOWSHIP.—This fellowship, originally founded in 1870 by the late Chancellor Henry W. Green, was permanently endowed in 1878 by his widow. This fellowship is open to any member of the senior class who graduates.

CLASS OF 1873 FELLOWSHIP IN ENGLISH LITERATURE.—This fellowship was established in 1908 by the Class of 1873. It is open to any member of the senior class of Princeton University who graduates. It is awarded, subject to the approval of the Faculty, by the decision of the full professors of the English Department, either (1) upon a competitive examination, or (2) upon general excellence of the work done in English during junior and senior years. The purpose of the donors is to promote the study of English literature in itself and in relation to the literatures of the world, ancient and modern.

THE E. M. BIOLOGICAL FELLOWSHIP.—This fellowship conveys the use of a table in the Laboratory of the U. S. Bureau of Fisheries at Woods Hole, Mass., together with all the facilities afforded for the collection and study of animal life during the season favorable for such investigations.

SAYRE FELLOWSHIP IN APPLIED CHEMISTRY.—This fellowship was founded by the bequest of the late Dr. John Stanford Sayre, of the Class of 1878. It will be awarded to that member of the senior class in Princeton University who shall pass the best examination in general chemistry, one year of qualitative analysis, one year of quantitative analysis, and general physics. The examination will be held on or about June first.

III. GRADUATE SCHOLARSHIPS

A few graduate scholarships yielding respectively three hundred and fifty dollars each, are maintained by University appropriation. There are also the following endowed graduate scholarships:

JAMES W. QUEEN GRADUATE SCHOLARSHIP.—This scholarship was founded in 1908 with a bequest of Mrs. Abby S.

Queen. By action of the Faculty it has been assigned to the Department of Physics.

THEODORE CUYLER GRADUATE SCHOLARSHIP.—This scholarship was founded by the late C. C. Cuyler, of the Class of 1879.

NOTE.—*The stipends of all fellowships and graduate scholarships are paid in four equal installments, ordinarily in October, January, March, and June.*

COURSES OF INSTRUCTION

NOTE.—*The courses in each Department are arranged in three groups: (1) courses of fundamental general importance which will be given each year or in pairs scheduled for alternate years, furnishing the main basis for the first two years of graduate study; (2) courses which may be given from time to time in each case there is sufficient demand for them; (3) senior courses which are starred (*) as open to graduate students.*

Any graduate course announced as given each year will be given if applied for by any duly qualified graduate student.

All courses are three hours a week, unless otherwise stated. Odd numbered courses are given in First Term, even numbered in Second Term.

I. DEPARTMENT OF PHILOSOPHY

JOHN GRIER HIBBEN, PH.D., LL.D., LITT.D., *Stuart Professor of Philosophy.*
ROGER BRUCE CASH JOHNSON, PH.D., *Professor of Philosophy.*
ARCHIBALD ALLAN BOWMAN, M.A., *Professor of Logic.*
EDWARD GLEASON SPAULDING, PH.D., *Professor of Philosophy.*
WARNER FITE, PH.D., *Stuart Professor of Ethics.*
GEORGE TAPLEY WHITNEY, PH.D., *Assistant Professor, Preceptor in Philosophy.*
HORACE CRAIG LONGWELL, PH.D., *Assistant Professor, Preceptor in Philosophy.*
PAUL ELMER MORE, A.M., LITT.D., LL.D., *Lecturer on Greek Philosophy.*
CHARLES WILLIAM HENDEL, JR., PH.D., *Assistant Professor, Preceptor in Philosophy.*
LAURENCE LADD BUERMEYER, PH.D., *Instructor in Philosophy.*
S. MCCLELLAN BUTT, A.M., *Instructor in Philosophy.*

1. COURSES GIVEN EACH YEAR, OR IN ALTERNATE YEARS

A. A Critical and Historical Survey of the general trend of philosophical and scientific thought. A course of lectures, one hour a week from January to April, with assigned collateral reading. Required of all candidates for the degree of Doctor of Philosophy. Professor Whitney.

Courses given in 1921-1922 and alternate years:

505, 506. The Philosophy of Aristotle, with an intensive

study of the text of the *Metaphysics*. Professor Bowman.

512. Pre-Kantian Rationalism. Reading and discussion of some of the more important systems of the period from Descartes to Kant. Professor Whitney.

519, 520. The Philosophy of Evolution. A general survey of evolutionary theory in various fields, and a crtical study of its philosophical implications and limitations. Professor Spaulding.

523. Mediaeval Philosophy. Lectures, reading of the sources, papers. The philosophy of this period will be considered in relation to Hellenic and Hellenistic ideas and the developing culture, and in its bearing upon later thought. Professor Longwell.

525. English Empiricism. An exposition and critical consideration of the works of some of the chief exponents of empiricism, from Locke to J. S. Mill. Professor Whitney.

529. Metaphysical Problems of Nature and the Self. Professor Johnson.

530. Contemporary Philosophy. This course will offer a survey of contemporary pragmatism, realism, and idealism. Professor Johnson.

532. The Individual and the State. A study of political theory with special reference to the underlying metaphysics and psychology. Professor Fite.

Courses given in 1922-1923 and alternate years:

501, 502. The Philosophy of Kant. *The Critique of Pure Reason, The Critique of Practical Reason, and The Critique of Judgment* will be read and systematically discussed. Professor Whitney.

509, 510. The Speculative Movement in Germany between 1794 and 1831, with special reference to the philosophy of Hegel. Professor Bowman.

515. The History of Ethics. The more important theories from Plato to the present time, based upon a reading of the sources. Professor Fite.

517, 518. The Logical Structure of Philosophical Systems. A study of the principles of method and of the "material" postulates upon which the main philosophical po-

sitions depend. An analytical and comparative study of tendencies and systems, especially Idealism, Phenomenalism, Naturalism, Pragmatism, and Neo-Realism. Professor Spaulding.

521. Nineteenth-Century Philosophy. A developmental and comparative study of German, British, and French philosophic thought during this period, with special reference to the transcendental and positive viewpoints. Lectures, readings, and papers. Professor Longwell.

527, 528. Theory of Reality. Reading and systematic discussion of the works of representative thinkers. Professor Johnson.

2. Courses Given in Case of Sufficient Demand

503. The Historical Method in Philosophy. A study of its origin and influence.

507, 508. The Philosophy of Plato, with an intensive study of the text of the *Republic*. Professor Bowman.

513. The Conception of Consciousness. The nature and significance of consciousness: a critical analysis of psychological theory and of the philosophical implications. Professor Fite.

3. Senior Starred Courses

*401. Fundamental Problems in Philosophy. Professor Bowman.

*402. Present Philosophical Tendencies. Professor Spaulding.

*405. History of Greek Philosophy. Professor Bowman.

*407. Ethics. Professor Fite.

*408. Social and Political Ethics. Professor Hendel.

*410. Hellenistic and Patristic Philosophy. Mr. More.

*411. The Philosophy of Modern France. Professor Hendel.

*414. Philosophy of Religion. Professor Longwell.

*415. Philosophy and History of Modern Science. Professor Spaulding.

512. Pindar and Bacchylides. The extant poems of both poets will be interpreted and certain of them critically studied. Professor Capps.

513. Aristotle. *The Athenian Constitution.* In addition to the interpretation of the text, collateral reading will be assigned in the historians, in Plutarch and in the inscriptions. Professor Capps.

514. Aristotle. The *Politics.* An introduction to the political and economic writings of Aristotle and to the social and political thought of Greece. The whole of the work will be covered, with collateral reading in Plato's *Republic* and *Laws.* Professor Capps.

516. Greek Comedy. The course of development of comedy will be followed from the beginning down to the perfected New Comedy. The plays of Aristophanes will be first rapidly reviewed, with a detailed study of their structure and technique. Especial attention will be paid to the early period and to the two great periods of transition. Professor Capps.

517. Thucydides. Selections from his account of the Peloponnesian War will be edited by members of the class, with textual, grammatical, and exegetical commentaries. Lectures will be given by the instructor and reports will be presented by members of the class, dealing with Greek historical literature in general, and with the life of Thucydides, his sources and methods, the literary and historical value of his work, and his influence in ancient and modern times. Professor Prentice.

518. History of Greece. Lectures on the History of Greek lands, from the earliest times to the Roman conquest. Special attention will be paid to the sources of historical knowledge, to the methods of historical study, and to the most recent developments of historical research. The testimony of various ancient authors on the same subjects will be compared, and certain historical problems will be assigned to the members of the class to give them practical experience in historical criticism. Professor Prentice.

521. Homeric Antiquities. Lectures will be given on the general subject. Special topics will be studied, such as the Homeric state and institutions, houses and furni-

ture, dress and private life, slavery, trade and crafts, war and weapons, religion and worship. Reports will be heard from the members of the class. Professor Prentice.

522. Topography of Attica. This course will deal primarily with the topography of Athens and Attica. The first book of Pausanias will be read and studied critically, with special reference to the problems concerning the city wall before and after Peisistratus, the temples of the acropolis, the precincts of Dionysus, the Pnyx and Agora. Reports will be read by members of the class on various topics. Lectures will be given on the life of Pausanias, his sources and the value of his book not only with reference to Archaeology in general but also to Mythology and History. Professor Johnson.

523. Greek Papyri. An introduction to the study of the Greek papyri, their decipherment and interpretation. Professor Capps.

524. Documents from the Greek Inscriptions. Exercises in the interpretation of important typical documents preserved in inscriptions, especially the Attic inscriptions from the fourth century on. Especial attention will be given to political and religious institutions, to the Athenian calendar, and to private life. Matters of epigraphy will receive only incidental attention, the object of the course being to familiarize the student with the documents as such. Professor Johnson.

525, 526. The Greek Theatre. The general field of Greek scenic antiquities will be covered by lectures and reports; but attention will be directed particularly to unsolved problems in connection with the history and structure of the theatre, technical terms, scenic appliances, the dramatic contests, and the like. Professor Capps.

527. Introduction to the Principles and Methods of Text Criticism. Portions of a single play of Euripides will be critically interpreted by the instructor and by members of the class in turn. Occasional lectures by the instructor on the aims and methods of textual criticism and interpretation; practical exercises in the construction of an apparatus criticus. Professor Capps.

530. Greek Dialects. A study of the sounds and forms of

the various dialects, on the basis of the dialect inscriptions. Buck's *Greek Dialects* will be used as an introduction to the work. This course alternates with that on the Italic Dialects. Professor Robbins.

533. Arrian and the Sources of the History of Alexander. A critical study of Alexander's conquests. The ancient authors dealing with the subject will be read with a view to comparing their accounts with one another, and to discovering the different lines of tradition. The origin and development of the *vulgata* will be traced. Professor Prentice.

534. Greek Inscriptions. Lectures will be given on the history of classical epigraphy, the alphabet, and the methods of interpretation. Practical exercises will be held in reading from casts and squeezes. Inscriptions of especial historical value, chiefly those of the fifth century, will be interpreted and discussed. Professor Prentice.

535, 536. Greek Tragedy. The beginnings of tragedy and the course of its development; the legendary material; the external conditions in which tragedy arose; the dramatic and scenic adjustment of its parts; the language and meters; and the history of our texts. The course will involve the reading and analysis of a number of tragedies by each member of the class and a general survey of all the extant plays by the instructor. Professor Capps.

Latin

Latin Composition. A certain degree of facility in writing Latin is expected of candidates for the Doctor's degree and those who have not already attained it are advised to make the necessary arrangements for the purpose with Professor Basore. (Alternating with Greek Composition.)

544. The Works of Caesar and his continuators. A course planned primarily for those who intend to teach in secondary schools. Professor Westcott.

548. Plautus. The course will deal, on the literary side, with dramatic form, character-drawing, diction, and style; on the linguistic side with vocabulary, metrical

treatment, and ante-classical forms and constructions. Professor Abbott.

549, 550. Virgil. The works of Virgil and the *Appendix Vergiliana* will be studied chiefly in their literary aspects. Attention will be paid to the poet's motives, sources, technique, and his influence on subsequent literature. Lectures and interpretations; reports on topics of Virgilian criticism. Professor Stuart.

552. Livy. Study of the credibility, sources, methods, and purpose of the History, and the development of the author's style. The results of study will be embodied in weekly reports. Professor Westcott.

556. Alexandrian Influence in Roman Poetry. This course will include a general survey of Alexandrian forms and tendencies in poetry and of their adaptation by the Roman poets of the Lake Republic and the Early Empire. The works of Catullus and of the Elegiac Poets will be the subjects of especial study. Professor Stuart.

557. Early Latin. Allen's *Remnants,* Merry's *Fragments of Roman Poetry,* and Bücheler's *Carmina Epigraphica.* The object of the course is especially to give some clear and ordered knowledge of the beginnings of Roman literature. The treatment will be mainly philological and literary. Professor Abbott.

558. Italic Dialects. Buck's *Grammar of Oscan and Umbrian* will be used. The aim of the course will be the historical and comparative study of these dialects in their relation to Latin. Professor Robbins.

554. Roman Biography. The origin and development of ancient biographical writing will be studied with especial reference to the literary and rhetorical aspects. The literary and the imperial biographies of Suetonius, the *Agricola* of Tacitus and certain *Vitae* found in the *Scriptores Historiae Augustae* will be subjected to analysis and criticism. Professor Stuart.

560. Ancient Literary Criticism. Lectures on the history of critical thought in antiquity. Reading and discussion of Aristotle's *Poetics,* Horace's *Art of Poetry,* Aristotle's *Rhetoric,* Book III, Demetrius *On Style,* Dionysius *On Literary Composition,* Longinus *On the Sublime,* Quintilian, Book X. Professor Basore.

563, 564. The Latin Romance. Attention will be directed in the main upon Petronius and Apuleius. The purpose of the course will be to study the origin, the history, and the characteristics of the Latin Romance. Papers will be presented from time to time by the members of the class. Professor Abbott.

567. Latin Inscriptions. A large number of inscriptions will be read and interpreted from the printed text and from squeezes; special historical topics will be taken up for investigation, and a thorough working knowledge of the contents of the *Corpus Inscriptionum Latinarum* will be acquired. Professor Abbott.

569. Historians of the Roman Empire. A study will be made of the sources used by the various historians in compiling their works, of their methods in dealing with these sources, of the literary and political influences under which they wrote, and of the tendencies exhibited in their works. Papers on these subjects will be prepared by members of the class and submitted for discussion. Professor David Magie.

572. The Roman Provinces. An analysis of the Roman imperial policy and of the methods by which the provinces were acquired and held, followed by a study of the Roman system of government and taxation in the provinces, of social and political conditions in the cities, and of municipal government under the empire. The course will be based mainly on the inscriptions, on Cicero's orations against Verres and his letters from Cilicia, and on Pliny's correspondence with Trajan. Professor Abbott.

573. History of the Early Roman Empire. The sources for the history of the Early Roman Empire will be critically examined and discussed, and the historical material thus obtained will be combined into a history of the period presented in reports by members of the class. Professor David Magie.

574. Research Course in Roman Politics. The political history of the years 62-57, 49-48, and 44-43 B.C. will be studied from the sources; the careers of the leading politicians of those years will be followed, and the character and purpose of the several political parties will be examined. Professor Abbott.

576. The Private Law Orations of Cicero. A study of the legal procedure of the time of Cicero. This course alternates yearly with course 578. Professor Westcott.

578. Sources of Early Roman Law. Bruns, *Fontes Iuris Romani Antiqui,* and Lindsay, *Latin Inscriptions* will be used. This course alternates yearly with course 576. Professor Westcott.

579, 580. Colloquial Latin. The object of the course will be to investigate some of the characteristics of colloquial Latin in the matter of lexicography, pronounciation, syntax and style, and to determine to some extent the relation of colloquial to literary Latin, as well as its connection with archaic Latin on the one hand and with the Romance languages on the other. Professor Abbott.

581. General Course in Classical Philology. Such topics will be briefly treated in lectures and in reports by students as the history of classical philology, the relation of the several fields to one another, the transmission and reconstruction of classical texts, the formation and use of a critical apparatus, the making of a lexicon, and the method to be used in testing the historical sources for a given period. Typical lists of books for classical students will also be prepared by the instructor and by members of the course. Professor Abbott.

587, 588. Augustine and Patristic Latin. The *De Civitate Dei* will be read. If time permits, other writings of Augustine, the *Apologeticus* of Tertullian and the *Octavius* of Minucius Felix will be read. Dean West.

589, 590. Early Mediaeval Histories. The following writings will be studied: Iordanes, *Getica;* Eugippius, *Vita Sancti Severini;* Beda, *Historia Ecclesiastica;* Einhard, *Vita Caroli Magni;* Alcuin, Epistles. Dean West.

Sanskrit and General Linguistics

*401, 402. Elementary Sanskrit. Grammar, exercises, and reading, with comparison of sounds and forms with the Latin, Greek, and Germanic. This course is intended especially for students of the Classical and Germanic languages. The Sanskrit is taught from the comparative standpoint, and its relationship in sounds, inflections, and syntax to the other Indo-European languages

is emphasized. Professor Robbins. [Given by Professor Bender in 1921-1922.]

501. Classical Sanskrit. Selections from the Hitopadeça, and the Mānava-Dharma-Cāstra. Introduction into the later Sanskrit literature. Comparative study of words and forms. Professor Bender.

502. Vedic Philology and Literature. Reading and interpretation of selected hymns of the Rig-Veda or Atharva-Veda, with comparative study of their linguistic and mythological elements. Professor Bender.

503. The Elements of Linguistic Science. The history, methods, and results of Comparative Philology, with some account of the ethnology and religions of the Indo-European peoples. The origin, life, and growth of language. Professor Bender.

504. Comparative Grammar of the Indo-European Languages. The fundamentals of the subject with special emphasis on Greek, Latin, German, Sanskrit. Detailed treatment of one of the following topics: vocalism, consonantism, noun-formation, inflection. Professor Bender.

2. Courses Given in Case of Sufficient Demand

505. Attic Orators. A study of the beginnings and development of Attic Oratory, excluding Demosthenes. Assigned readings in Antiphon, Andocides, Lysias, Isaeus, Isocrates, Aeschines. Collateral reading and reports.

510. Demosthenes. Private Orations. The private orations will be interpreted, with discussion of typical questions of Athenian private law. Professor Capps.

537. Greek Palaeography. A brief survey of the development of writing in the Papyri, and a thorough study of the uncial and minuscule Bookhand, with practical exercises in deciphering, dating, and investigating specimens of it. Introduction to the principles and methods of textual criticism, applied to the postclassical and Byzantine texts. The collation and classification of manuscripts, the construction of an apparatus criticus, discussion of readings and editions, formation of indices. Dr. Richardson.

565. Palaeography. General and applied. Introduction to the psychology, methodology, and history of ancient

writings; the material and form of books, the evolution of alphabetic writing, the science and method of textual and higher criticism. Application in the field of Latin codices, with practice in decipherment, dating, and the method of research; including search for the manuscripts, exercise in the description and collation of manuscripts and the formation of genealogical tables, the discrimination of documents and voluntary variations. Dr. Richardson and Dr. Robinson.

3. Starred Senior Courses

*401. Lucretius. Professor Basore.
*413. Tacitus. Professor Westcott. [Not given, 1921-1922.]
*416. Thucydides. Professor Capps. [Not given, 1921-1922.]
*421. Roman Law. Professor Westcott. [Given by Dr. Carpenter in 1921-1922.]

Equipment and Facilities for Study

In addition to the general collections of the University Library, students in the Department of Classics, including Semitics, have the use of the *Classical Seminary,* which occupies four rooms in the University Library building and contains 8,547 volumes and 2,512 dissertations, and the *Semitic Seminary* of over 8,000 volumes including the Paton Collection of Oriental Philology and History, also located in the University Library building.

Other available collections in the Library are the Brünnow Library of Oriental Literature, the Garrett Collection of Manuscripts, the Collection of Cuneiform Documents, the Morgan Collection of Virgils and the Patterson Collection of Horaces.

In the Museum of Historic Art are collections of ancient pottery and of Greek and Roman gems, coins and marbles, and also objects found by the Princeton Expeditions to Syria.

III. DEPARTMENT OF MODERN LANGUAGES

WILLIAMSON UPDIKE VREELAND, D. ÈS L., *Woodhull Professor of Romance Languages.*
CHRISTIAN GAUSS, A.M., LITT.D., *Professor of Modern Languages.*
DOUGLAS LABAREE BUFFUM, PH.D., *Professor of Romanic Languages and Literature.*
VARNUM LANSING COLLINS, A.M., *Professor of the French Language and Literature.*
JOHN PRESTON HOSKINS, PH.D., *Professor of Germanic Languages and Literature.*
MAX FREDERICK BLAU, PH.D., *Professor of Germanic Languages and Literature.*
†GEORGE MADISON PRIEST, PH.D., *Professor of Germanic Languages and Literature.*
CHARLES CARROLL MARDEN, PH.D., *Emory L. Ford Professor of Spanish.*
EDWARD COOKE ARMSTRONG, PH.D., LL.D., *Professor of the French Language.*
HAROLD HERMAN BENDER, PH.D., *Professor of Indo-Germanic Philology.*
DONALD CLIVE STUART, PH.D., *Professor of Dramatic Literature.*
HARVEY WATERMAN THAYER, PH.D., *Associate Professor of Modern Languages.*
FRANK LINLEY CRITCHLOW, PH.D., *Assistant Professor, Preceptor in Modern Languages.*
WILLIAM KOREN, A.M., *Assistant Professor, Preceptor in Modern Languages.*
LOUIS CONS, LIC. ÈS L., *Assistant Professor of Modern Languages.*
PERCY ADDISON CHAPMAN, A.M., *Assistant Professor of Modern Languages.*
FREDERICK COURTNEY TARR, PH.D., *Instructor in Modern Languages.*
NEMOURS HONORÉ CLEMENT, A.M., *Instructor in Modern Languages.*
WALTER SCOTT HASTINGS, PH.D., *Instructor in Modern Languages.*
LAWRENCE FRANCIS HAWKINS LOWE, A.M., *Instructor in Modern Languages.*
GUY BLANDON COLBURN, PH.D., *Instructor in Modern Languages.*
ORESTES VERA, BR. EM HU., *Instructor in Modern Languages.*
MERVIN EUGENE BASSETT, A.B., *Instructor in Modern Languages.*
JEAN FROIS-WITTMAN, BACH. ÈS L., *Instructor in Modern Languages.*
WILLIAM KYLE SMITH, A.B., *Instructor in Modern Languages.*
HARRY BRETZ, A.M., *Instructor in Modern Languages.*

1. COURSES GIVEN EACH YEAR

ROMANIC

501, 502. History of French Sounds and Inflections. Lectures, discussion, and application to text selections. Professor Armstrong.

503, 504. Old French. An introduction to the study of the

† Absent on leave.

language, followed by general reading of the literature (history, national epic, Arthurian cycle, drama, and lyric poetry). Professor Buffum.

505, 506. The French Language: Studies in Analysis and Method. Practical exercises in philological method will be based on the constitution from manuscript material of a portion of a critical text; the successive stages in the syntactical history of the French verb will be treated in their relation to modern French usage; and the general principles of interpretation will be applied to a certain number of Old Provençal texts. Professor Armstrong.

521, 522. French Text Interpretation. Methodical and analytic reading from the point of view of language as well as of sources, ideas, influence: an experimental and concrete history of portions of French literature. Conducted entirely in French. Professor Cons.

523, 524. Studies in XVIIth Century French Literary Art and Style. La Fontaine. Conducted entirely in French. Professor Cons.

525, 526. Rousseau and the Origins of Romanticism. A study of the elements and sources of Rousseau's work and their relation to the Romantic Movement. Professor Gauss.

551, 552. Spanish Historical Grammar. Lectures on phonology and morphology; study of specific texts, for the purpose of applying the laws deduced in the lectures. Professor Marden.

553. Old Spanish Readings. Reading and linguistic study of the *Poema de mio Cid* and other literary monuments of the early period. Professor Marden.

554. Spanish. A study of the epic poetry of Spain as manifested in the full length poems and popular ballads. Professor Marden.

555, 556. Spanish Seminary: the Spanish Ballad. Professor Marden.

2. Courses Given in Case of Sufficient Demand

511. The French National Epic. A critical survey of the *Chansons de Geste* and analysis of a few representative texts of the royal, feudal, and provincial groups. Professor Critchlow.

512. The Breton Epic. The works of Chrétien de Troyes and their relation to the origins of the Arthurian material. Professor Buffum.

531. History of the Novel in France. Reading, lectures, and the preparation and discussion of papers, treating of the rise of the novel and its development to the end of the seventeenth century. Professor Vreeland.

561. Modern Spanish Novel. Lectures, conferences, and extensive reading. Professor Marden.

3. Senior Starred Courses

The following courses, designed primarily for undergraduates in their senior year, are open to approved graduate students. For such students as desire graduate credit there will be specially assigned readings and special arrangement of the preceptorial hours.

*401, 402. French. The Romantic Movement. Professor Gauss.

*403. French Literature of the Eighteenth Century. Professor Stuart.

*404. French Literature of the Sixteenth Century. Professor Cons.

*405, 406. French Composition, Pronunciation, and Style. Professor Armstrong.

*407, 408. Dramatic Technique. Professor Stuart.

*409. Spanish Literature of the Seventeenth Century. Dr. Tarr.

*410. Contemporary Literature of Spain and Spanish America. Dr. Tarr.

*411, 412. Italian. Professor Koren.

Germanic

501. Old High German. Grammar, reading, and lectures on the historical development of the German language. Knowledge of modern German and Middle High German required, and some knowledge of Gothic useful. Professor Hoskins.

503. Gothic. Grammar, reading, and lectures. Papers based on investigations of special subjects. This course will be comparative in its methods and will aim to furnish additional equipment for the study of Germanic and

Indo-European grammar, phonetics, syntax and etymology. Knowledge of modern German required. Professor Bender.

510. Middle High German. Grammar, lectures, and reading. A foundation for the historical study of modern German and introduction to the study of Germanic philology. Proficiency in modern German is required. Professor Hoskins.

511, 512. Old Icelandic. Grammar, lectures, and reading. For advanced students. Professor Priest. [Not given 1921-1922.]

514. Lithuanian. Introduction to the language and literature. Grammar studied comparatively. Selections read from Donaltius' *Seasons,* and from the folk-songs (Dainos). Lectures on general subjects, including the influence of German on Lithuanian. Knowledge of German required. Professor Bender.

515, 516. History of the Novel in Germany. The early prose romances, the Volksbücher, the pastoral, heroic and picaresque novel, the humorous, philosophical, sentimental, and romantic novel of the eighteenth and early nineteenth centuries, the origin and growth of the realistic novel, studies in recent German fiction. Professor Thayer.

In addition to the work offered in Germanics, courses in General Linguistics and Sanskrit are also given. See pages 236-237.

The following courses, though not regularly scheduled for 1921-1922, have been offered in previous years, and may, on application, be given:

504. German Literature since 1885. Professor Priest. [Not given in 1921-1922.]

517, 518. History of Lyric and Ballad Poetry in Germany. Professor Blau.

509. Historical German Grammar. Professor Hoskins.

522. Introduction to the Study of Old German Literature. Professor Hoskins.

Equipment and Facilities for Study

In addition to the general collections of the University Library students in the Department of Modern Languages

have the use of the *Romance Seminary*, founded and maintained by the Class of 1890, and containing 5,000 volumes and 2,000 dissertations, and the *Germanic Seminary* founded by the Class of 1891, including the library of the late Professor Willard Humphreys, and containing 4,000 volumes and 2,000 dissertations.

Both of these Seminaries are located in the building of the University Library close to the shelves of the main collection in Modern Languages.

IV. DEPARTMENT OF ENGLISH

George McLean Harper, Ph.D., *Holmes Professor of Belles Lettres and English Language and Literature.*
Henry van Dyke, D.D., LL.D., Hon. D.C.L., (Oxon.) *Professor of English Literature.*
Thomas Marc Parrott, Ph.D., *Professor of English.*
Harry Franklin Covington, A.M., *Professor of Public Speaking and Debate.*
John Duncan Spaeth, Ph.D., Litt.D., *Professor of English.*
Charles Grosvenor Osgood, Ph.D., *Professor of English.*
Alfred Noyes, M.A., C.B.E., *Visiting Professor of English.*
Gordon Hall Gerould, B.Litt. (Oxon.) *Professor of English.*
Robert Kilburn Root., Ph.D., *Professor of English.*
Morris William Croll. Ph.D., *Professor of English.*
Charles William Kennedy, Ph.D., *Professor of English.*
Francis Charles MacDonald, A.B., *Associate Professor of English.*
Radcliffe Heermance, A.M., *Assistant Professor, Preceptor in English.*
Herbert Spencer Murch, Ph.D., *Assistant Professor, Preceptor in English.*
Samuel Shellabarger, Ph.D., *Assistant Professor, Preceptor in English.*
Joseph Epes Brown, Jr., A.M., *Instructor in English.*
William Lee Sandidge, Jr., M.S., *Instructor in English.*
Edward Ayers Taylor, A.M., *Instructor in English.*
Dwight Leonard Durling, A.B., *Reader in English.*
MacKinley Helm, A.B., *Reader in English.*
Theodore Rondthaler, A.B., *Reader in English.*

1. Courses Given Each Year or in Alternate Years

501. Introductory Course in Old English. A study of Old English grammar and syntax, and a general survey of Old English literature with extensive illustrative reading. Professor Kennedy.

502. Introductory Course in English Philology. A survey of the general principles of linguistic development, and of the history, vocabulary, and structure of the English language, with especial emphasis on the Germanic ori-

gins, and the laws of phonetic and semantic change in English. Professor Spaeth. [Given hereafter in alternate years, beginning 1922-1923.]

503. The Old English Epic: Pagan. This course will consist in either: (a) a critical reading of Beowulf with study of its historical backgrounds and of Germanic Culture; or (b) an investigation of the heroic epic in Germanic literature, with special reference to the bearing of the main cycles on Old English literature. The Scandinavian and Old and Middle High German epics may be read in translation but the Old English material is studied in the original. Epic stories, like that of the Nibelungen Lied, are traced through various forms down to their treatment in modern times. Professor Spaeth. [Given hereafter in alternate years, beginning 1922-1923.]

504. The Old English Epic: Christian. A critical reading of the poems of Cynewulf, or the poems of the Junian M.S., a study of their relationship to their sources and to the heroic epic, and an investigation of the influence of European culture, particularly that of the church, on the development of Old English literature. Professor Kennedy.

505, 506. Chaucer. The aim of the course is to give the student a thorough acquaintance with Chaucer's writings and with the literature of Chaucerian scholarship. Among the topics considered are: the collation and affiliation of manuscripts and the construction of a critical text; tests for determining the genuineness of works attributed to the poet; the chronology of his writings and the methods of determining it; contemporary literature in France, Italy, and England; Chaucer as typical of the later Middle Ages. [1921-1922 and alternate years thereafter.] Professor Root.

507, 508. Types of Mediaeval Narrative. Romances, legends, fabliaux, or exampla will furnish the material for investigation in this course. The type chosen will be studied with reference to its origins, native and Continental; its relationship to other forms; its development; and its influence on later literature. Practice will thus be afforded in the critical handling of mediaeval documents as well as shaping of literary history. [1920-1921 and alternate years thereafter.] Professor Gerould.

509, 510. The English Ballad. The nature and origins of the English and Scottish traditional ballads will be investigated with reference not only to their native development but to similar developments in folk literature generally. Problems connected with the transmission and survival of ballads, with their historical and cultural significance, and with their influence on modern English poetry are within the scope of the course. [1921-1922 and alternate years thereafter.] Professor Gerould.

511, 512. The Renaissance in England, with especial reference to Spenser. A study of the poetry and genius of Spenser, especially as modified and determined by Humanism and the Italian Renaissance. [1921-1922 and alternate years thereafter.] Professor Osgood.

513, 514. Milton. The chief cultural forces of Milton's time, especially those which were combined in his own character and training; his achievements in prose and poetry with reference to their origins, forms, artistic and ethical values, etc.; his significance in English political and literary history. [1922-1923 and alternate years thereafter.] Professor Osgood.

515, 516. Elizabethan Drama. The object of this course is to obtain a first-hand knowledge of the chief figures and main types in the drama from 1500 to 1642. [1920-1921 and alternate years thereafter.] Professor Parrott.

517, 518. Shakespeare. Introduction to the criticism and interpretation of the text of Shakespeare. [1921-1922 and alternate years thereafter.] Professor Parrott.

519, 520. The forms of English Prose-Style from 1500 to 1680 in relation to their classical and mediaeval models, and to the movements of contemporary thought. [1920-1921 and alternate years thereafter.] Professor Croll.

521, 522. Eighteenth Century Classicism. During the first term study will center about Pope and Swift; during the second term about Dr. Johnson. Each student will be assigned a special topic for exhaustive study and investigation. [1920-1921 and alternate years thereafter.] Professor Root.

523, 524. Wordsworth and Coleridge. Their early contemporaries (Burke, Paine, Cowper, Burns, Blake, Godwin, Scott, Hazlitt, Lamb, Southey, De Quincey), their relation to the political and philosophical currents of

their time, and their influence upon the theory and practice of poetry in Britain and America. [1920-1921 and alternate years thereafter.] Professor Harper.

525, 526. Period from 1815 to 1848 in English Literature, with special emphasis on Byron and Shelley, and their relation to Revolutionary ideals, and on Carlyle and Matthew Arnold in their relation to Romantic ideals in literature, philosophy and politics. [1921-1922 and alternate years thereafter.] Professor Spaeth.

527, 528. History of Literary Criticism. A study of the chief theories of criticism, ancient and modern. [1921-1922 and alternate years thereafter.] Professor Harper.

529, 530. The English Lyric. The object of the course is to trace the chief influences which have provided the English lyric with its forms. [1921-1922 and alternate years thereafter.] Professor Croll.

2. Courses Given in Case of Sufficient Demand

531, 532. Advanced Linguistics. See Sanskrit and General Linguistics, 503 and 504. Professor Bender.

533, 534. Old French. An introductory course, especially adapted to students of English. See Modern Languages, Romanic 503, 504. Professor Buffum.

535, 536. Technique of the Drama. See Modern Languages, Romanic, *407, 408. Professor Donald Stuart.

537, 538. The Drama in England from 1660 to 1900. This course begins with the opening of the theatres after the Puritan Revolution and ends with the work of our contemporary dramatists. It aims to show the successive development of various dramatic types and to introduce the student to the theory, technique, and historical background of modern drama. Professor Heermance.

3. Starred Senior (and Junior) Courses

*303. Elements of Poetry. The object is to introduce the student to the understanding and enjoyment of poetry as an art. The nature of poetry as distinguished from the other arts; its origin; its kinds; the most important forms and their history. Restricted course. Professor Croll.

*410. (Classics 426). English Literature and the Classics. The quality of English Literature as variously determined by the influence of the Classics; the spirit of the Classics as manifest in the form and content of English Literature. Readings in some ten or fifteen authors ancient and modern. If elected as an English course the ancient authors will be read in the best English versions. Restricted course. Profeessor Osgood.

*306. Spenser and Milton. A study of their works and of their relation to the Renaissance and the Reformation. Restricted course. Professor Harper.

*405. Wordsworth and Coleridge. Their part in the Revolutionary movement and their service in renovating English Poetry. Restricted course. Professor Harper. [1921-1922 and alternate years thereafter.]

*412. English Poetry of the Nineteenth Century. A study of some of the leading British and American poets. Divisional course. Professor van Dyke, and preceptors.

Equipment and Facilities for Study

In addition to the general collections of the University Library, students in the Department of English have the use of the *English Seminary* founded and supported by Mr. Charles Scribner and containing over 3000 volumes and 1200 dissertations. The Class of 1875 Library of English Poetry and Drama, of 3000 volumes, is distributed among the collections relating to these subjects. Graduate students are also welcomed as guests at the meetings of the Modern Language Club.

V. DEPARTMENT OF ART AND ARCHAEOLOGY

ALLAN MARQUAND, PH.D., L.H.D., *Professor of Art and Archaeology and Director of the Museum of Historic Art.*
HOWARD CROSBY BUTLER, A.M., *Professor of History of Architecture.*
FRANK JEWETT MATHER, JR., PH.D., L.H.D., *Marquand Professor of Art and Archaeology.*
CHARLES RUFUS MOREY, A.M., *Professor of Art and Archaeology.*
GEORGE WICKER ELDERKIN, PH.D., *Associate Professor of Art and Archaeology.*
EARL BALDWIN SMITH, PH.D., *Assistant Professor of Art and Archaeology.*
SHERLEY WARNER MORGAN, A.B., B.ARCH., *Assistant Professor of Architecture.*
EDWIN AVERY PARK, *Assistant Professor of Architecture.*
WILLIAM WOODBURN POTTER, B.S., *Lecturer on Architecture.*
T. LESLIE SHEAR, *Lecturer on Classical Archaeology.*
ALBERT M. FRIEND, JR., *Instructor in Art and Archaeology.*

REGULATIONS

1. Students who have not completed the undergraduate curriculum of the Department, or its equivalent, will make up this deficiency, or those subjects in the curriculum which they have not already taken, in the first year of graduate work. This requirement does not include drawing courses, or technical courses.

2. Language Requirements.

a. All graduate students are required to have, or quickly to acquire, a reading knowledge of French and German.

b. Further ability to use languages is expected as follows:

For students of Classical Archaeology: a reading knowledge of Greek and Latin.

For students of Mediaeval Art: Latin.

For students of Renaissance Art: Latin and Italian.

3. Collateral Courses.

a. Undergraduates expecting to do graduate work in the Department are urgently recommended to take, besides the entire undergraduate curriculum of the Art Department, collateral courses in the literature and history of the classical, mediaeval and renaissance periods.

b. Graduate students are recommended to take collateral graduate work in history and literature covering the great periods of artistic production.

4. All candidates for degrees, including that of Master of Fine Arts, will be expected to pass satisfactorily the general examination, and must take, in preparation for this examination, at least twelve graduate courses according to schedule approved by the Department.

5. Students in Classical Archaeology will be expected to pursue four courses in the mediaeval and renaissance fields.

6. All candidates for general examination must have completed at least one graduate course in the following subjects:

Classical Archaeology
Mediaeval Illumination
Mediaeval Italian Painting
Italian Painting of the Renaissance
Renaissance Sculpture.

[Graduate courses in the History of Architecture may be substituted for any two of these.]

7. The degree of Master of Fine Arts (M.F.A.) is conferred upon students who have completed successfully two years of graduate study in the history of art and have passed a general examination equivalent in scope and standards to the general examinations required of candidates for the doctorate in Philosophy. Candidates for the degree of Master of Fine Arts are expected to follow such sound informative studies as shall qualify them broadly in the history and appreciation of the fine arts. Students looking forward to general administrative positions in Art Museums or to journalistic art criticism will naturally seek the degree of Master of Fine Arts, as those who wish to become specialists in the curatorial side of museum work, or college or university teachers, will continue to seek the degree of Doctor of Philosophy.

1. Courses Given Each Year, or in Alternate Years

Open to students who have completed the Princeton undergraduate curriculum or its equivalent:

519. Development of Architectural Styles. The Early Christian Style. Professor Butler.
520. Development of Architectural Styles. The Byzantine Style. Professor Butler.
527. Italian Sculpture of the early fifteenth century. Ability to read Italian is required. Professor Marquand.

528. Italian Sculpture of the late fifteenth century. Ability to read Italian is required. Professor Marquand.
533. Sienese Painting before 1350. Professor Mather.
537. Early Christian Art: sources of mediaeval iconography and symbolism. Professor Morey.
538. Mediaeval Illumination of manuscripts. Professor Morey.
543. Greek Archaeology: architecture, sculpture, painting ceramics, gems, coins, terra cotta and metal work. Professor Elderkin.
544. Greek Sculture. A systematic study of the history of Greek Sculpture. Professor Elderkin.

ALTERNATE COURSES

521. Development of Architectural Styles. The Romanesque Style. Professor Butler.
522. Development of Architectural Styles. The Gothic Style. Professor Butler.
525. Italian Sculpture: Gothic of the thirteenth century. Ability to read Italian is required. Professor Marquand.
526. Italian Sculpture: Gothic of the fourteenth century. Ability to read Italian is required. Professor Marquand.
531. Early Florentine Painting: Giotto and the Giottesque. Professor Mather.

2. COURSES GIVEN IN CASE OF SUFFICIENT DEMAND

509, 510, 511. The History of Ornament and Decoration (three term course). Professor Smith.
523. Italian Sculpture; fourth to the eleventh century. Ability to read Italian required. Professor Marquand.
524. Italian Sculpture: eleventh to thirteenth century. Ability to read Italian required. Professor Marquand.
532. El Greco and Velasquez. Professor Mather.
534. Leonardo da Vinci. Professor Mather.
535. Masaccio and the Realists. Professor Mather.
536. Venetian Painting of the Renaissance: Giorgione, his origins, development and influence. Professor Mather.
539. Byzantine Art. Professor Morey.
541. Romanesque Sculpture in France. Professor Morey.
545. Greek Painting. Professor Elderkin.
547. Olympia, Delphi and Epidaurus. Professor Elderkin.

549. The Bellini and Mantegna. Professor Mather.
550. The Van Eycks and Early Flemish Painting. Professor Mather.

3. Starred Senior Courses

*401. Renaissance and Modern Sculpture. A general treatment of sculpture from the end of the Middle Ages to modern times. Lecturer, Professor Morey; Preceptors, Professors Morey and Smith.
*402. Greek Sculpture. A study of the technique, forms, composition and development of Greek Sculpture. Lectures and required reading. Lecturer and Preceptor, Professor Elderkin.
*403. The Revival of Painting in Italy. An outline history painting in Italy from Cavallini to Michelangelo, with special regard to the Florentine School. Lecturer, Professor Mather; Preceptors, Professors Mather and Smith.
*404. Modern Painting. The theory and development of Modern Painting will be traced to the year 1900. Artistic movements will be related to their cognate tendencies in literature and politics. Especial attention will be given to the growth of romanticism in painting with its sequels in realism and impressionism. Lecturer, Professor Smith; Preceptors, Professor Smith and Mr. Friend.
*405, 406. Classical Architecture. A detailed study of the architecture of the Greeks and Romans in its historical development in antiquity and during the Classical Renaissance. The second term is devoted to the history of the Renaissance and the New Classic architecture. Lecturer, Professor Butler; Preceptors, Professors Butler and Smith.

School of Architecture

For descriptions of further courses in Architecture and of the plan of study in the School of Architecture, see The School of Architecture.

Equipment and Facilities for Study

The work of graduate students in the Department of Art and Archaeology and in the School of Architecture is centered chiefly in the Museum of Historic Art which contains besides the large Marquand Library of 7000 volumes on the

history of art and several thousand photographs and slides of art monuments, various collections of coins, gems, marbles, medals and casts. The Trumbull Prime Collection of pottery contains figurines, beads and amulets and vases. The Class of 1881 collection of casts includes ancient, Mediaeval and Renaissance sculptures.

The draughting room of the School of Architecture is housed at present in a temporary annex to the Museum pending the enlargement and completion of the main building, which will also provide better and more spacious housing for the library.

McCormick Hall adjoining the western side of the Museum of Historic Art will be devoted to the use of the School of Architecture and will be completed in 1922.

VI. DEPARTMENT OF HISTORY AND POLITICS

†Paul van Dyke, D.D., *Pyne Professor of History.*
†John Howell Westcott, Ph.D., *Musgrave Professor of Latin and Tutor in Roman Law.*
Henry Jones Ford, LL.D., *Professor of Politics.*
Robert McElroy, Ph.D., LL.D., *Edwards Professor of American History.*
Edward Samuel Corwin, Ph.D., *McCormick Professor of Jurisprudence.*
Frank Frost Abbott, Ph.D., *Kennedy Professor of Latin Language and Literature.*
Dana Carleton Munro, A.M., L.H.D., *Dodge Professor of Mediaeval History.*
‡Philip Marshall Brown, LL.D., *Professor of International Law.*
William Starr Myers, Ph.D., *Professor of Politics.*
*Henry Robinson Shipman, Ph.D., *Associate Professor of History and Politics.*
Thomas Jefferson Wertenbaker, Ph.D., *Associate Professor of History and Politics.*
Clifton Rumery Hall, Ph.D., *Assistant Professor, Preceptor in History and Politics.*
Walter Phelps Hall, Ph.D., *Assistant Professor, Preceptor in History and Politics.*
William Seal Carpenter, Ph.D., *Assistant Professor in History and Politics.*
Dayton Voorhees, A.M., *Instructor in History and Politics.*
Sheldon Jenckes Howe, A.M., *Instructor in History and Politics.*
John Colt, A.M., *Instructor in History and Politics.*
Robert Montgomery Stephenson, A.M., *Instructor in History and Politics.*
Kenneth Bonner, LL.B., *Instructor in History and Politics.*
Donald Leroy Stone, A.M., *Instructor in History and Politics.*

† Absent on leave.
‡ Absent on leave, First Term.
* Absent on leave, Second Term.

1. Courses Given Each Year or in Alternate Years

History

501, 502. Mediaeval History. Professor Munro.

511, 512. The French Revolution and Napoleon [1922-1923)] to alternate with

513, 514. Modern History since 1815 [1921-1922]. Professor Shipman.

519, 520. Political Development in the British-American colonies in the 17th and 18th centuries [1922-1923], to alternate with

522. The British Colonial System in the 17th and 18th centuries [1921-1922]. Professor Wertenbaker.

525. The United States since the Civil War. Professor C. R. Hall.

505. Diplomatics. Dr. Van Hoesen.

503, 504. Mediaeval Civilization. Professor Munro.

507, 508. English History from the Conquest to Henry VII [1922-1923], to alternate with

509, 510. The Tudor and Stuart Periods. [Not given 1921-1922.] Professor Paul van Dyke.

515, 516. The British Empire in the 19th and 20th Centuries [1921-1922], to alternate with

517, 518. The Social and Industrial History of Great Britain [1922-1923]. Professor W. P. Hall.

523, 524. American History from the formation of the Federal Constitution to the Civil War. Professor McElroy.

(See Department of Classics for further Historical Courses there available.)

Politics

527, 528. International Law and Diplomacy. [Not given 1921-1922.] Professor Brown.

529, 530. American Constitutional Law and Theory. Professor Corwin.

533, 534. Representative Government. Professor Ford.

535, 536. Origin and Development of American Political Institutions. Professor Myers.

539, 540. Advanced Research Course in International Law. [Not given 1921-1922.] Professor Brown.

3. Starred Senior Courses

*401, 402. Constitutional History of England. Professor Shipman.

*403, History of the American Colonies. Professor Wertenbaker.

*404. American Democracy since the Cicil War. Professor C. R. Hall.

*405, 406. Local Government in the United States and other countries. Professor Ford.

*412. Modern Political Theory. Professor Carpenter.

*421. Roman Law. Professor Carpenter.

Other undergraduate courses of interest to graduate students in History and Politics will be found listed in the Catalogue for the current year.

Note.—*The following rules have been adopted by the Department of History and Politics, to cover graduate work in the Department:*

1. All courses open to graduate students for credit are to be seminary courses, with the exception of the following starred senior courses, as numbered in the current Catalogue, namely 401, 402, 403, 404, 405, 406, 412, 421.

2. Instructors are to be free to require graduate students to get up necessary work by resort to lecture courses, or otherwise, without additional credit being awarded toward a graduate degree.

3. Instructors are to publish lists of reading to be done in connection with their respective courses.

4. Students of the Princeton Theological Seminary pursuing graduate work in the Department are to be required to do the same amount and the same quality of work in particular courses as are required of full time graduate students pursuing the same courses.

Equipment and Facilities for Study

In addition to the main collection of the University Library, students in the Department of History and Politics have the use of the *Historical Seminary* and the *Political Seminary*, the former containing more than 4000 volumes and the latter about 2500 volumes.

Special collections in the University Library of particular value to students of history are the *Pierson Civil War Collection* of 6700 volumes, 2500 pamphlets and several thousand clippings relating to the war between the States, the *Paton Spanish War Collection*, the *European War Collection* including the *Benjamin Strong Collection* which is especially rich

in official documentary and newspaper material; and a recently acquired collection on the period of the French Revolution, which is especially rich in monographic material. Of great value to the student of politics is the *Pitney Library of International Law,* which is one of the most complete in the country. The equipment of the Library for the study of Constitutional Law is also excellent.

A special reading room in History and Political Science is arranged on the top floor of the south stack building of the University Library.

VII. DEPARTMENT OF ECONOMICS AND SOCIAL INSTITUTIONS

Frank Albert Fetter, Ph.D., LL.D., *Professor of Political Economy.*
*Edwin Walter Kemmerer, Ph.D., *Professor of Economics and Finance.*
George Brinton McClellan, A.M., LL.D., *Professor of Economic History.*
David Aloysius McCabe, Ph.D., *Professor of Economics.*
Frank Haigh Dixon, Ph.D., *Professor of Economics.*
Stanley Edwin Howard, Ph.D., *Assistant Professor of Economics.*
Frank Dunstone Graham, *Assistant Professor of Economics.*
Arthur Fletcher Lucas, A.B., *Instructor in Economics and Social Institutions.*
Charles Paddock Johnson, A.M., *Instructor in Economics and Social Institutions.*
Hugh M. Fletcher, A.M., *Instructor in Economics and Social Institutions.*
Seymour E. Harris, A.B., *Instructor in Economics and Social Institutions.*
William Whipple Bennett, A.B., *Instructor in Economics and Social Institutions.*
James Douglas Brown, A.M., *Instructor in Economics and Social Institutions.*

Graduate Courses

501. Economic Principles. A systematic review of the theory of value and of the fundamental problems in the theory of distribution. Especially for first year graduate students. Given every year. Professor Fetter.

502. Economic Doctrines to 1860. An examination of the sources and beginnings of the concepts, terminology, and fundamental theories of economics, interpreted in the light of the then existing economic and political conditions. Given alternate years, [1922-1923]. Professor Fetter.

* Absent on leave, Second Term.

504. Economic Doctrines since 1860. The modern developments in general theory after J. S. Mill, concluding with the most recent discussions and solutions, with especial attention to contemporary American opinions. Given alternate years, [1921-1922]. Professor Fetter.

507. Monetary and Banking History of the United States. The period covered is from 1789 to the resumption of the specie payments in 1879. A seminar course based chiefly upon source materials. In addition to the general work of the course each student is required to make an intensive study of some special topic and to give a report upon it to the seminar. Given alternate years, [1922-1923]. Professor Kemmerer.

508. Money. A study of the principles of money and of their present-day application as exemplified in certain modern currency reforms. Given alternate years. [1922-1923]. Professor Kemmerer.

509. Banking. A study of present-day banking conditions and problems in the United States. American problems are studied in the light of their history and of European banking experience. Given alternate years, [1921-1922]. Professor Kemmerer.

510. Public Finance. A study of the principles of the shifting and incidence of taxation, and of their application to certain American taxes. Given alternate years, [1923-1924]. Professor Kemmerer.

514. Labor Problems and Labor Organizations. An examination of present-day labor problems, followed by an intensive study of the history, policies and influence of trade unions, especially in the United States. Given alternate years, [1921-1922]. Professor McCabe.

516. Labor Legislation. A study of the legislative measures in this and other countries for the amelioration of the condition of the industrial classes. Given alternate years, [1922-1923]. Professor McCabe.

519. Problems of Corporation Control. A study of the court decisions and the legislation affecting the organization and management of industry, including the work of the Federal Trade Commission. An appraisal of the present situation with its lessons for the future. Given alternate years. Professor Dixon.

520. Railroad Rate Structures and Traffic. An analysis of the powers of the Interstate Commerce Commission over rates, followed by a concrete study of existing rate structures and their modification and adjustment through the decisions of the Commission. This involves questions of long and short haul, differentials, preferences, allowances, joint rates vs. local rates; competitive vs. non-competitive rates; principles of classification, and the like. Given alternate years. Professor Dixon.

521. Valuation and Capitalization. The principles of valuation and capitalization including depreciation, going concern values, land and franchise values, good will, as developed in court and commission cases and decisions, applied to the problems of public utility regulation. Given alternate years. Professor Dixon .

522. Public Utility Regulation. A study of the decisions of the more important state public service commissions with the purpose of determining the principles upon which regulation and rate making in the leading public utilities are based. This will cover the regulation of electric railways, electric light and gas plants, water power companies, telephone companies, and similar industries. Given alternate years. Professor Dixon.

525, 526. Accounting. A study of the theory and practice of accounting in private, corporate, and governmental business. Given every year. Professor Howard.

532. Statistics. A study of the methods of collection, presentation and analysis of statistical data, with special reference to their applications to present-day economic problems. Readings and informal discussion, accompanied by exercises in computation and analysis. Given every year. Dr. Kemper Simpson.

Undergraduate Courses

Note.—*In starred senior courses elected by graduate students supplementary work is provided and a weekly conference is held. The name given is that of the instructor in charge of the course.*

201. Historical Economics. Professor McCabe.

202. Descriptive Economics. Present-day economic organization. Professor McCabe.

301. Elements of Economics. The fundamental principles of

economics. Prerequisite to Economics 302, 306, 307, 308, 401, 402, 403, 405, 406, 407, 408. Professor Fetter.

302. Economic Problems. A continuation of preceding course, applying the principles to a number of the most important present-day economic problems. Professor Fetter.

306. Statistics. The theory, method and interpretation of statistics.

307. Elements of Accounting. Must be preceded or accompanied by Economics 301 (or 303). Professor Howard.

308. Principles of Accounting. A continuation of Economics 307. Professor Howard.

*401. Money and Banking. Professor Kemmerer.

*402. Public Finance. Professor Graham.

*403. European Economic Policy in the Nineteenth Century. Professor McClellan.

*405. Labor Problems. Professor McCabe.

*406. Social Economics. Professor Fetter.

*407. Corporation Finance. Professor Dixon.

*408. Economics of Transportation. Professor Dixon.

Equipment and Facilities for Study

Seminary in Economics. The graduate students, candidates for degrees, will meet from time to time with the members of the Faculty to discuss theses in progress. No registration is required.

Readings in German, French and Spanish Economists. A study of some of the leading works for the purpose of affording practice in the use of these languages for scientific study. One hour a week, optional. Given as the need appears, by some professor of the Department.

Special Lectures and Conferences. A feature of the graduate work in the Department of Economics and Social Institutions is the series of lectures by non-resident specialists in the various fields of economics and social science, followed by informal conferences on the topic with the lecturer, at the Graduate College. These conferences are attended by the faculty and graduate students of the Department.

The Pliny Fisk Statistical Library

By the gift of Mr. Pliny Fisk, of the Class of 1881, Princeton possesses one of the best libraries in the field of American corporation and government finance in the United States. The library has been in process of collection since 1880 by the banking house of Harvey Fisk and Sons, and contains over 6000 books on financial subjects together with 17,700 pamphlets, 48,000 circulars and 80,675 carefully selected newspaper clippings.

There is a nearly complete set of railroad mortgages for all railroads of the United States where the mortgages exceed $500,000. There are also numerous copies of leases, reorganization agreements and similar documents. The railroad reports date back to 1828, and for most American roads of importance the sets are complete. There is also a valuable collection of mortgages and reports of street railway companies, and of leading industrial corporations.

The bound volumes include complete sets of a number of important serial publications, many of which are rarely found in university libraries.

In the line of government publications there is much valuable material, including complete sets of the reports of railway, corporation, and public utility commissions of the leading States.

The literature in the form of circulars, letters, prospectuses, and newspaper clippings relating to the finances of railroads, public utilities, industrial corporations and municipalities is rich. The material is carefully indexed, and for the most part with elaborate cross references. The index includes a card index of all corporation notes in the *Commercial and Financial Chronicle* from the first volume to the present time.

This collection is installed in the Library building, in a room contiguous to the stacks containing the economic books and the government documents, and near the Class of 1888 Economic Seminary. An experienced librarian is in charge. Students in financial and other courses find in this collection an unrivalled source of materials.

Economic Seminary

The Economic Seminary founded and endowed by the Class of 1888 is located close to the Pliny Fisk Library and contains about 5000 volumes.

VIII. DEPARTMENT OF MATHEMATICS

HENRY BURCHARD FINE, PH.D., LL.D., *Dod Professor of Mathematics.*
†HENRY DALLAS THOMPSON, D.Sc.. PH.D., *Professor of Mathematics.*
LUTHER PFAHLER EISENHART, PH.D., *Professor of Mathematics.*
OSWALD VEBLEN, PH.D., *Professor of Mathematics.*
WILLIAM GILLESPIE, PH.D., *Professor of Mathematics.*
CHARLES RANALD MACINNES, PH.D., *Associate Professor of Mathematics.*
JOSEPH HENRY MACLAGAN WEDDERBURN, D.Sc., *Associate Professor of Mathematics.*
JAMES WADDELL ALEXANDER, PH.D., *Assistant Professor of Mathematics.*
WILLIAM ERSKINE CLELAND, A.M., *Instructor in Mathematics.*
GEORGE EMIL RAYNOR, A.M., *Instructor in Mathematics.*
PHILIP FRANKLIN, PH.D., *Instructor in Mathematics.*
CYRUS COTTON MACDUFFEE, PH.D., *Instructor in Mathematics.*

A student who presents himself for Part I of the examination for the Ph.D., degree is expected to be prepared in the subjects of the undergraduate curriculum in mathematics, including Mechanics, Projective Geometry, Analysis and Functions of a Complex Variable; also in Higher Algebra, Differential Geometry, Advanced Analysis, and Functions of Real Variables.

COURSES TO BE GIVEN 1921-1922

503, 504. Algebra. Professor Wedderburn.
505, 506. Differential Geometry. Professor Eisenhart.
507, 508. Advanced course in Analysis. Professor Alexander.
527, 528. Analysis Situs. Professor Veblen.

SEMINARY

Lectures on outstanding problems in some particular field of mathematics together with reports by students on special topics belonging to this field. Both terms. In 1921-1922 the subject is The Theory of Relativity. Professors Eisenhart and Veblen.

2. COURSES GIVEN IN CASE OF SUFFICIENT DEMAND

509, 510. Theory of functions of real variables.
511. Theory of Substitutions and Galois Theory of Algebraic Equations.

† Absent on leave.

514. Linear Groups and Invariants.
515. Theory of Elimination.
516. Theory of Matrices. Advanced course.
517. Theory of Numbers.
521. Linear Differential Equations.
523, 524. Differential Equations of Physics.
526. Calculus of Variations.
530. History of Analysis.
531, 532. Integral Equations.
534. Elliptic Functions.
535. 536. Theory of Sets of Points.
537, 538. Conformal Representation and Uniformization of Analytic Functions.
540. Vector Analysis.
541, 542. Projective Geometry. Advanced course.
543, 544. Differential Geometry. Advanced course.
545, 546. Algebraic Functions.

3. Starred Senior Course

*401, 402. Functions of a complex variable. Introductory course. Professor Fine.

IX. DEPARTMENT OF PHYSICS

William Francis Magie, Ph.D., LL.D., *Henry Professor of Physics.*
Elmer Howard Loomis, Ph.D., D.Sc., *Professor of Physics.*
Howard McClenahan, E.E.. M.S., LL.D., *Professor of Physics.*
Augustus Trowbridge, Ph.D., *Professor of Physics.*
Edwin Plimpton Adams, Ph.D., *Professor of Physics.*
Hereward Lester Cooke, M.A., *Professor of Physics.*
Karl Taylor Compton, Ph.D., *Professor of Physics.*
August John Mundt, B.S., E.E., *Instructor in Physics.*
Gyfford Davidson Collins, A.M., *Instructor in Physics.*
Charles Thomas Zahn, B.E., *Instructor in Physics.*
Donald MacLean Purdy, A.B., *Instructor in Physics.*
Roy James Kennedy, A.B., *Instructor in Physics.*

1. Courses Given Each Year, or in Alternate Years

501, 502. Mathematical Theory of Electricity and Magnetism. Theory of the potential; lines and tubes of force; electrostatics; dielectrics; electric images; magnetism and magnetic induction; electromagnetism; electromagnetic induction; equations of the electromagnetic field; electromagnetic theory of light; theory of alternating

currents; general equations; effects of resistance, inductance and capacity; distributed capacity; the rotating field; single and polyphase currents; high frequency currents and electrical oscillations; alternating current calculations; the symbolic method. Both terms, 2 exercises, about 5 hours a week. Professor McClenahan.

505, 506 *a*. Analytical Mechanics, including the theory of small oscillations and the theory of the potential. Professor Adams.

505, 506 *b*. Hydrodynamics and Elasticity. Professor Adams.

[*Courses 505, 506 a and 505, 506 b are not given in the same year. The one to be given will be determined by the professor in charge.*]

508. The Kinetic Theory of Gases. Introductory sketch of the theory of probabilities. Elementary study of pressure in gases. Maxwell's law of distribution and its developments. Equipartition of energy. Molecular magnitudes. The Brownian movements. Boltzmann's H-theorem. Professor W. F. Magie.

509, 510. Light. Physical Optics: interference, Huygen's Principle, diffraction, polarization. Electromagnetic Theory: isotropic and crystalline bodies, absorption, dispersion, natural and magnetic activity, media in motion. Radiation: thermo-luminescence, fluorescence. Professor Trowbridge.

511, 512 *a*. Electron Theory of Matter. Dielectric media; optical dispersion and absorption; magnetism; metallic conduction; thermionic, photolectric, Peltier, Thomson and Hall effects; radiation and temperature. Professor Compton.

511, 512 *b*. Atomic Structure. Phenomena of conduction of electricity through gases, ionization, production of radiation and spectral series, quantum relations, X rays, radioactivity and chemical relations which afford important evidence regarding atomic structure. Study of Lewis', Langmuir's and Bohr's theories of atomic structure. Professor Compton.

[*Courses 511, 512 a and 511, 512 b are given in alternate years.*]

2. Courses Given in Case of Sufficient Demand

514. Theory and Practice of Exact Measurements. This course is intended for students who have already had training in general laboratory practice. It is designed to instruct them in more refined methods of observation, and especially to train them in the use of those instruments which are frequently employed in research. Professor Loomis.

518. Atmospheric Electricity. Introduction to theory of ionized gases. Methods of observation. Atmospheric ionization, its causes and distribution. Atmospheric potential gradient. General electrical phenomena. Detailed discussion of work of various observers. Professor Cooke.

520 *a*. The Mathematical Theory of Electric Waves and Oscillations. Professor Adams.

520 *b*. Statistical Mechanics, Kinetic Theory of Gases, and Quantum Theory. A discussion of the methods of statistical mechanics, with applications to the kinetic theory of gases and the theory of radiation. Professor Adams.

[*The courses 520 a and 520 b are not given in the same year. The one to be given will be determined by the professor in charge.*]

3. Starred Senior Courses

*411, 412. Electricity and Magnetism. Professor Adams.

*413, 414. Theoretical Physics. (a) Thermodynamics; (b) The Electron Theory. Professors W. F. Magie and Compton.

*415, 416. Experimental Physics: Electricity and Magnetism. Professor Cooke.

Equipment and Facilities for Study

The Palmer Physical Laboratory

The Palmer Physical Laboratory, the gift of the late Stephen S. Palmer, Esq., was completed in 1908 and is devoted to the uses of the Department of Physics and the School of Electrical Engineering.

It contains five lecture rooms, seven recitation rooms, four large laboratories and a number of smaller ones, rooms for

the professors, for the library, the museum, and for research students. Three machine shops are provided, and rooms are equipped for the storage batteries, electrical charging machinery, and switchboards, a chemical laboratory a Roentgen ray room, constant temperature rooms and a grating room, in addition to store rooms, balance rooms and photographic and photometric dark rooms. The three floors give a combined area of approximately two acres for the work of instruction and research.

The equipment includes four storage batteries, of sixty cells each, the necessary electrical charging machinery, a very extensive and flexible system of wiring for both direct and alternating currents, a refrigerating plant, a liquid air plant, a vacuum and pressure system leading to all parts of the building, a large machine shop with a full outfit of hand and machine tools.

Through the generosity of David B. Jones, Esq., and Thomas D. Jones, Esq., of the Class of 1876, a fund of $200,000 has been given for endowment, the income of which is used by the two departments occupying the laboratory, for the purchase of supplies, for the construction of apparatus, and for the satisfaction of the general scientific needs of the two departments.

X. DEPARTMENT OF ASTRONOMY

HENRY NORRIS RUSSELL, PH.D., *Professor of Astronomy, Director of the Observatory.*

RAYMOND SMITH DUGAN, PH.D., *Professor of Astronomy.*

JOHN QUINCY STEWART, PH.D., *Assistant Professor of Astronomical Physics.*

1. COURSES GIVEN EACH YEAR

501, 502. Practical Astronomy. Theory of instruments. Methods of observation with astronomical instruments. Discussion of observations and results. Professor Dugan.

503, 504. Binary Stars. Visual, spectroscopic and eclipsing binaries. Discussion of observations, determination of orbits, and deduction of astrophysical data. Professor Russell.

505, 506. Photometry. Laws of radiation and illumination. Photometric catalogues. Observation of variable stars with polarizing photometer attached to 23-inch tele-

scope. Photographic photometry. Observations with Neilson photographic doublet and measurement of plates. Discussion and interpretation of light-curves. Professor Dugan.

2. Courses Given in Case of Sufficient Demand

507, 508. Celestial Mechanics. An introduction to the general problems of the motions of the heavenly bodies. Lectures and collateral readings in the treatise of Tisserand. Professor Russell.

509, 510. Determination of Orbits. Reading course, with practice in computation. Watson, Oppolzer, Bauschinger. Professor Russell.

511, 512. Measurement of Astronomical Photographs. Theory and practice of measurement and reduction. Determination of the positions of stars, planets, and the moon. Stellar parallax and proper-motion. Professor Russell.

513, 514. Research Course in Stellar Photometry. A program of observation with the 23-inch equatorial, or the Neilson Camera and measuring machine, will be carried out to secure material for accurate light-curves of variable stars. Discussion of observations and deduction of results from light-curves. Both terms, hours unlimited. This course may be continued during the following year. Professor Dugan.

515, 516. General Astrophysics. The distribution, motions and properties of the stars, clusters and nebulae. Statistical studies. Stellar dynamics. Theories of the constitution and evolution of the stars. Cosmogony. Discussion of existing data and theories, with research on current problems. Both terms, hours unlimited. This course may be continued during a second year. Professor Russell.

3. Starred Senior (and Junior) Courses

*401, 402. Honors course in Celestial Mechanics. Elliptic motion; determination of orbits; disturbed motion; tidal evolution. Professors Russell and Dugan.

*403. Stellar Astronomy. A review of the present state of knowledge concerning the stars. Stellar positions,

proper-motions, radial velocities, and parallaxes; group and stream motions: visual, spectroscopic and eclipsing binaries; stellar spectra, colors, and temperatures, variable and new stars; masses and densities of the stars; characteristics of different spectral types: distribution of the stars in space; clusters and nebulae; theories of stellar evolution. Lectures. Professor Russell.

Equipment and Facilities for Study

The *Halsted Observatory* is devoted to scientific work and contains the great equatorial of 23 inches aperture, provided with the usual micrometric, spectroscopic and photometric accessories.

The *Observatory of Instruction* is devoted entirely to the use of students. It possesses a 9½-inch equatorial (also by Clark) with accessories, a 5-inch camera by Brashear, transit instruments, chronographs, clocks, a measuring engine, etc.

The Departmental Library, which is housed in the Observatory of Instruction, contains complete series of the most important astronomical periodicals, and a full collection of other works of reference.

XI. DEPARTMENT OF CHEMISTRY

Leroy Wiley McCay, D.Sc., *Professor of Chemistry.*
Fred Neher, A.M., *Professor of Organic Chemistry.*
George Augustus Hulett, Ph.D., *Professor of Physical Chemistry.*
William Foster, Ph.D., *Professor of Chemistry.*
Alan Wilfrid Cranbrook Ménzies, Ph.D., *Professor of Chemistry.*
Lauder William Jones, Ph.D., *Professor of Organic Chemistry.*
Hugh Stott Taylor, D.Sc., *Associate Professor of Physical Chemistry.*
Donald Pritchard Smith, Ph.D., *Assistant Professor of Chemistry.*
Nathaniel Howell Furman, Ph.D., *Assistant Professor of Chemistry.*
Charles Leslie Fleece, A.M., *Assistant Professor of Chemistry.*
Gregg Dougherty, Ph.D., *Instructor in Chemistry.*
Charles Phelps Smyth, Ph.D., *Instructor in Chemistry.*
Charles Walter Gray, A.B., *Instructor in Chemistry.*

1. Courses Given Each Year, or in Alternate Years

511. Organic Chemistry. Lectures on stereochemistry and tautomerism, supplemented by conferences and reports. Given 1921-1922 and alternate years. Prerequisite courses: Organic Chemistry, Parts I, II, and III, or equivalent. Professor Neher.

515. Electrochemistry. Lectures on electrochemistry dealing more particularly with the relation of electrical to chemical energy, with reading and discussions of the most recent developments. Professor Hulett.

516. Principles of Industrial Electrochemistry. Electroplating, the refining of metals, electrometallurgy and electrothermics will be considered from the energy, engineering and economic standpoint. Professor Hulett.

517. Special Chapters in Organic Chemistry. Lectures and seminars. Given during the Second Term 1921-1922. Professor Jones.

522. Thermodynamics and Chemistry. Lectures and reading devoted largely to chemical equilibrium and the energy side of chemical reactions, accompanied by lectures on chemical thermodynamics. Professor Taylor.

2. Courses Given in Case of Sufficient Demand

Note.—*The courses in this section are subdivided into*

IIa. Lecture and Laboratory courses

IIb. Research Work

IIc. Reading Courses

IIa.

503. Physical Metallurgy. The physico-chemical properties of metallic systems in their relation to composition and constitution. Lectures and reading. Professor D. P. Smith.

513, 514. Advanced Laboratory Courses in Organic Chemistry. The work may involve preparations and organic analysis. It may be preliminary to research according to the advancement of the student. At least 9 hours of laboratory work a week. Professor Jones.

520. Chemistry of Colloids. Study of colloidal state of surface energy and the theory of colloids. This course will consist of two lectures and laboratory work. Three hours a week. Professor Hulett.

521. Photochemistry and the Chemistry of Radiant Energy. Lectures and reading on the chemical reactions produced by light and radio-active energy, with recent developments in theory and practice. Professor Taylor.

530. Higher Inorganic Chemistry. Lecture, supplemented by

conferences and reports, dealing chiefly with modern advances in this field. Professor Menzies.

IIb.

501, 502. Research in Analytical Chemistry. Both terms, at least 9 hours of laboratory work a week. Professor McCay.

505, 506. Research in Metallography. Constitution and electrical properties of alloys; gas alloys. Both terms, hours to be arranged. Professor D. P. Smith.

509, 510. Research in Inorganic Chemistry. Both terms, hours to be arranged. Professor Menzies.

523, 524. Research in Physical Chemistry. Both terms, hours to be arranged. Professor Hulett.

525, 526. Research in Electrochemistry. Both terms, hours to be arranged. Professor Hulett.

527, 528. Research in Physical Chemistry. Both terms, hours to be arranged. Professor Taylor.

531, 532. Research in Organic Chemistry. Both terms, hours to be arranged. Professor Jones.

IIc.

Reading Courses in Physical Chemistry. Reading and Discussion of selected authors and topics. Both terms, hours to be arranged. Professor Taylor.

Reading Course in Organic Chemistry. Both terms. Hours to be arranged. Professor Jones.

Reading Courses in other branches are in course of preparation and will be announced.

3. Starred Senior Courses

*403. Advanced Quantitative Analysis, Part IV. This course involves about 9 hours of laboratory work, in addition to one or more class exercises, each week. Prerequisite courses: General Inorganic Chemistry, Qualitative Analysis, Parts I, II, III. Professors McCay and Furman.

*404. Metallography. The metals and their alloys; structure, constitution and properties; methods of investigation. Lectures and laboratory work. Professor D. P. Smith.

*405. Organic Chemistry, Part III. Devoted to a more de-

tailed study of special subjects and theories; malonic ester and acetoacetic ester; carbohydrates; amino-acids and polypeptides; urea, ureides, and purines; benzene theory; dyes and color theory, etc. Lectures, and recitations. Prerequisites: Parts I, and II or equivalents. Professor Neher.

*406. Organic Chemistry, Part IV. A laboratory course. Prerequisites: Organic Chemistry Parts I and II or equivalents. Professor Jones.

*407. Physical Chemistry Part III. One lecture and two laboratory periods. Electrochemistry and Thermochemistry. Professor Hulett.

*408. Physical Chemistry Part IV. Two lectures and one laboratory period. Equilibrium and velocity of reactions. Professor Hulett.

*409, *410. Advanced Inorganic Chemistry. A more intensive study of the inorganic field than is possible in the elementary courses. In particular, especial attention will be given to the introductory study of chemical crystallography, valence, and colloids. Classroom and laboratory work. Prerequisite: course 302. Professor Menzies.

*411, *412. Chemistry in its Relation to Industry. First term. Lectures and written recitations. Fundamental chemical industries, including fuels, acids, alkalies and salts will be considered from the energy, engineering and economic standpoints. Professor Taylor. Second term. A discussion of important chapters of organic chemistry, with special reference to their bearing upon the problems of industrial chemistry. Professor Jones.

Equipment and Facilities for Study

The *Chemical Laboratory* contains the laboratories for general inorganic chemistry, quantitative analysis, physical chemistry and metallography, one small lecture room, and private laboratories.

In the *School of Science Building* are located the laboratory for qualitative analysis, the lecture room and preparation room for general inorganic chemistry, the laboratory for advanced inorganic chemistry, and a part of the space devoted to organic chemistry. The balance of the work in organic chemistry is conducted in the *Class of 1877 Laboratory.*

XII. DEPARTMENT OF BIOLOGY

WILLIAM BERRYMAN SCOTT, PH.D., LL.D., Sc.D., (Harv. et Oxon.) *Blair Professor of Geology.*
WALTER MEAD RANKIN, PH.D., *Professor of Biology, Curator of Herbarium.*
CHARLES FREEMAN WILLIAMS MCCLURE, D.Sc., *Class of 1887 Professor of Zoology.*
EDWIN GRANT CONKLIN, PH.D., D.Sc., *Professor of Biology.*
ULRIC DAHLGREN, M.S., *Professor of Biology.*
GEORGE HARRISON SHULL, PH.D., *Professor of Botany and Genetics.*
EDMUND NEWTON HARVEY, PH.D., *Professor of Physiology.*
MARCUS STULTS FARR, D.Sc., *Assistant Professor, Preceptor in Geology.*
LEWIS ROBINSON CARY, PH.D., *Assistant Professor of Biology.*
STEWART PATON, M.D., *Lecturer on Neuro-Biology.*
ALFRED GOLDSBOROUGH MAYOR, Sc.D., *Lecturer on Biology.*
CHARLES HENRY ROGERS, A.B., *Curator of the Museum of Biology.*
CHARLES LEO MACY, *Assistant in Botany and Genetics.*
LIONEL VALDEMAR SILVESTER, A.B., *Assistant in Biology.*

1. COURSES GIVEN EACH YEAR

501. Cytology. Lectures, laboratory and research work on protoplasm, the structures and functions of cells, nuclear and cell division, origin and maturation of the germ cells. Professor Conklin.

502. Ontogenesis. Lectures, laboratory and research work on the fertilization, cleavage and promorphology of the egg; phenomena of differentiation; problems of experimental embryology; the cellular basis of heredity and evolution. Professor Conklin.

503. Comparative Histology and Histogenesis. Studies of supporting, nutritive, excretory, respiratory and several other groups of tissues, including their origin and development, repair, regeneration and metamorphosis. Lectures, laboratory and research work. Professor Dahlgren.

504. History of the Kinetic and Nerve Tissues. Comparative studies of the organs and tissues which produce light, heat, motion, and electricity; the tissues of sensation, communication, and stimulation; the organization of nerve tissues in several animal forms. Lectures, laboratory and research work. Professor Dahlgren.

505. Morphology of the Organ Systems of Vertebrates. Conferences, laboratory, and research work on the comparative anatomy and development of the organ sys-

tems of vertebrates. About 3,000 anatomical preparations and an embryological collection of about 1,200 series are at present available for reference and study in connection with this course. Professor McClure.

506. Special Problems of Vertebrate Anatomy. Conferences, laboratory, and research work. This course is designed to place the student in a position to comprehend the main problems of vertebrate morphology and completes the study of the comparative anatomy and development of the organ systems of the anamnia and amniota. Professor McClure.

507. The Development of Plant Life. Studies in the structure, life-history, and taxonomy of various groups of plants. Professor Rankin.

508. Systematic Botany of the Vascular Plants. Structure as related to description and classification. Exercises in plant analysis, description and classification. The character of the larger families of Angiosperms. Professor Rankin.

510. Theories of Evolution. A history of the doctrine of evolution, with discussion of the theories which have been proposed to explain the modes and factors of development. Professor Scott.

511, 512. (Geology 511, 512.) Vertebrate Palaeontology. Lectures and laboratory work on the morphology and evolution of fossil vertebrates. Both terms, 3 or more hours a week. Professors Scott and Farr.

513, 514. Physical Chemistry of the Cell. An application of the principles of physical chemistry to physiological problems. The rôle of diffusion, osmotic pressure, electrolytic dissociation, reaction velocity, catalytic action and surface tension in organisms, the properties of colloids, the effect of salt on cells, and the permeability of cells and tissues will be studied in considerable detail. Based on Philip's *Physical Chemistry,* and Hoeber's *Physikalische Chemie der Zelle and Gewebe,* (third edition). Professor Harvey.

2. Courses Given in Case of Sufficient Demand

515, 516. Morphology and Physiology of the Central Nervous System. A series of conferences with graduate students, together with assignments of problems and di-

rection of research work in the field of Neuro-Biology. Both terms, number of hours indefinite. Dr. Paton.

517, 518. Normal and Experimental Embryology. A study of the principles of development and of embryonic differentiation. The work is both observational and experimental and includes a study of normal life-histories as well as experimental studies on the factors of differentiation and development. Important books and original publications dealing with the subject are assigned for study. Professor Conklin.

519. Oceanography in its relation to problems of marine biology. Effects of currents, temperature, alkalinity, geologic changes, chemical reactions in the sea, etc., upon the physiology, morphology habits and distribution of marine animals. Lectures and conferences. Dr. Mayor.

521, 522. Research in Genetics. The investigation of problems in variation and heredity of plants and animals, with assigned readings and conferences. Open to men fully qualified by previous training. Both terms, 3 or more hours a week and extending through the summer season. Professor Shull.

3. Undergraduate Courses Open to Graduate Students

a. *Starred senior courses for which credits may be given*

BIOLOGY

*401. Comparative Anatomy of Vertebrates. Professor McClure.

*402. Vertebrate Embryology. Professor McClure.

*403. Histology. Professor Dahlgren.

*404. Advanced Histology. Professor Dahlgren.

*406. Vertebrate Palaeontology. Professor Scott.

*407, 408. General Physiology. Professor Harvey.

*412. Biological Chemistry. Professor Harvey.

b. *Other senior and junior courses which may be taken by graduate students and for which no credit is given*

301, 302. Botany. An introduction to the general principles of plant life. Professor Rankin.

303. Comparative Osteology. Professor Farr.
304. Bacteriology. Professor Dahlgren.
305. Invertebrate Zoology. Professor Cary.
306. Parasitology. Professor Cary.
307, 308. Genetics and Eugenics. Professor Shull.

Public Lectures

The Study of Human Activities in relation to Educational and Social Problems. Occasional lectures open to all members of the University. Dr. Paton.

Occasional public lectures upon oceanographic and physiological subjects, and also lectures in connection with zoological courses upon the embryology, anatomy, physiology, and relationships of coelenterates. Dr. Mayor.

Biological Seminary

An organization of the instructors and graduate students of the Department, which meets weekly throughout the academic year for the presentation of the results of original work, both by members of the seminary and by invited investigators from other institutions.

Equipment and Facilities for Study

The Biological Department is housed in the east half of *Guyot Hall,* which was erected in 1909. This building is situated at the southeast corner of the campus on the southerly slope below the Palmer Physical Laboratory, and beyond it fields, woods, and brooks extend down to Lake Carnegie, thus affording unrivalled opportunities for biological gardens and vivaria.

The *Vivarium* is a separate building with glass roof and large concrete aquaria; the latter have an aggregate area of nearly four hundred square feet and a capacity of about ten thousand gallons, one half of which is devoted to sea-water, and the other half to fresh-water. In addition there are rooms with suitable cages for keeping insects, amphibians, reptiles, birds and mammals; also private research rooms, photographic rooms and pump rooms. Adjoining the building are flying cages for birds, runways for mammals, and glass houses for plants. Near the Vivarium a biological pond has been formed by damming up a brook.

Museums and Collections

The *Zoölogical Collections* are especially rich in osteological and ornithological material. The former includes a large number of mounted and disarticulated skeletons of fishes, reptiles, birds and mammals. The collections of mounted and unmounted bird skins are especially large, including some sixteen thousand individuals. The collection of Invertebrata includes a complete series of specimens prepared by the Zoological Station at Naples, as well as a large number of corals and shells of mollusks.

The *Morphological Museum* contains about three thousand preparations, which consist of dissections and corrosions, illustrating the comparative anatomy of vertebrates.

The *Histological Collection* consists of some thirty thousand mounted microscopical specimens illustrating the various forms of tissues of many different animals; some five thousand specimens are stored in paraffin blocks.

The *Botanical Collections* include a local collection, representing the New Jersey flora, of five thousand sheets; some forty thousand sheets of plants from different sections of the United States, from South America, Europe and Asia; and ten thousand sheets of mosses from Sweden.

The *Palaeontological Collections* are particularly rich and valuable and include large series of Tertiary fossils from the western part of the United States, and from Patagonia.

The Biological Laboratories

The *Zoölogical* and *Anatomical Laboratories* include five class rooms, equipped as laboratory-lecture rooms, seven private research rooms, two preparation rooms, a chemical room, seven private research rooms, two preparation rooms, a chemical room, two photographic rooms, an artist's room and six store rooms.

The *Physiological Laboratories* comprise one large laboratory-lecture room, two smaller laboratories, three private research rooms, a photographic room and a shop. These rooms closely adjoin the animal rooms in the sub-basement and Vivarium.

The *Botanical Laboratory* includes two laboratory-lecture rooms, four private rooms and the herbarium room. A glass house and vivarium afford at all seasons a considerable variety

of land, fresh-water, and marine plants for study. A greenhouse 22 x 100 feet, with headhouse 15 x 24 feet, has been erected and fully equipped for experimental work in genetics, and about fourteen acres of level land to the south of Guyot Hall have been set apart and especially prepared for the growing of pedigree-cultures.

The *Palaeontological Laboratories* are part of the geological equipment and are found in the west half of the building.

Library

The *Biological Library* consists of about fourteen thousand volumes. It contains sets of about ninety of the principal biological periodicals, as well as standard reference books and monographs. Through the generosity of Charles W. McAlpin, of the Class of 1888, several hundred volumes are added to it each year.

Publications

Reprints of scientific articles published by members of the Biological Department are collected and issued in volumes under the general title, *"Contributions from the Biological Laboratories in Princeton University."*

XIII. DEPARTMENT OF GEOLOGY

William Libbey, D.Sc., *Professor of Physical Geography and Director of the E. M. Museum of Geology and Archaeology.*

William Berryman Scott, Ph.D., LL.D., Sc.D., (Harv. et Oxon.) *Blair Professor of Geology.*

Alexander Hamilton Phillips, D.Sc., *Professor of Mineralogy.*

Charles Henry Smyth, Jr., Ph.D., *Professor of Geology.*

Gilbert Van Ingen, *Associate Professor of Geology, Curator of Invertebrate Palaeontology.*

Marcus Stults Farr, D.Sc., *Assistant Professor, Preceptor in Geology.*

William John Sinclair, Ph.D., *Assistant Professor, Preceptor in Geology, Curator of Vertebrate Palaeontology.*

Arthur Francis Buddington, Ph.D., *Assistant Professor of Geology, Curator of Petrology and Economic Geology.*

Benjamin Franklin Howell, Ph.D., *Assistant Professor of Geology, Assistant Curator of Invertebrate Palaeontology.*

1. Courses Given Each Year

Each candidate for a higher degree in Geology is required to take the senior course in Practical Geology, 405-406, during the first year of his attendance and to meet all the requirements of that course.

501, 502. Chemical Geology. Composition of the earth and the chemistry of geological processes. Professors Smyth and Buddington.

503, 504. Stratigraphy. Lecture, field, and laboratory work. Professors van Ingen and Howell.

505, 506. Petrology. A general study of the igneous, sedimentary, and metamorphic rocks. Laboratory, library, and field work. Professors Smyth and Buddington.

507, 508. Mineralogy. The paragenesis and chemical relations of minerals, and the study of crystallographic types. Professor Phillips.

509, 510. Geological History of Man. Lectures, reading, and discussion of original memoirs. Professor Sinclair.

511, 512. Vertebrate Palaeontology. Lectures and laboratory work on the morphology and evolution of fossil vertebrates. Professors Scott and Farr.

513, 514. Economic Geology. The metalliferous and non-metalliferous mineral deposits of economic importance. Laboratory, library, and field work. Professors Smyth and Buddington.

515, 516. Invertebrate Palaeontology. Morphology and evolution of the more important groups of extinct invertebrates. Lectures, laboratory, and field work. Professors van Ingen and Howell.

518. Physical Geography. The relations of geography and history. Professor Libbey.

3. Starred Senior Courses

Senior courses in Geology, also listed as graduate courses, will be modified and augmented to suit the proficiency of the applicants. More detailed information regarding the graduate work in Geology may be obtained from the Secretary of the Department.

*401, 402. Introduction to Palaeontology. Professors Scott, van Ingen, Sinclair, and Howell.

*403, 404. Petrology. Professors Smyth and Buddington.

*405, 406. Practical Geology. Professors vanIngen, Buddington, and Howell.

*407, 408. Optical Mineralogy and Petrography. Professor Phillips.

*409, 410. Economic Geology. Professors Smyth and Buddington.

Equipment and Facilities for Study

The geological laboratories and collections occupy the western half of Guyot Hall, the museum, general lecture room and library being shared with the Department of Biology. Besides a large graduate laboratory, there are several smaller rooms for graduate students and special investigators, seminary rooms and a club room for students in the Department. The geological library contains about 6500 volumes. The facilities for research are extensive.

The teaching and study collections are constantly augmented by means of the field trips conducted as part of the regular work of the Department, and by means of the summer field work carried on in various regions by the officers and graduate students.

XIV. DEPARTMENT OF PSYCHOLOGY

Howard Crosby Warren, Ph.D., *Stuart Professor of Psychology, Director of the Psychological Laboratory.*
Henry Clay McComas, Ph.D., *Associate Professor of Psychology.*
Carl Campbell Brigham, Ph.D., *Assistant Professor of Psychology.*
Henry Lane Eno, A.B., LL.B., *Research Associate in Psychology.*
Henry Andrews Cotton, A.M., M.D., *Lecturer on Psychopathology.*
Michael Jacob Zigler, Ph.D., *Instructor in Psychology.*

M. George Scheck, A.B., *Assistant in Psychology.*

1. Courses Given Each Year

501, 502. Research in Experimental Psychology. Students with sufficient training are assigned original research problems. About 9 hours of laboratory work weekly. Professor Brigham.

503. Physiological Psychology. Lectures, Demonstrations, and reports. Professor Brigham.

504. Psychopathology. Lectures, and clinical demonstrations at the Trenton State Hospital. Dr. Cotton.

Psychological Seminary. Topic to be determined in consultation with the class. Open to graduate students in Psychology. Both terms. Professors Warren and McComas.

2. Courses Given in Case of Sufficient Demand

505, 506. Theory and Methods of Experimental Psychol-

ogy. Lectures, with demonstrations, and minor laboratory problems. Professor Warren.

3. Starred Senior Courses

*402. History and Psychology of Education. This course is designed to meet the needs of students intending to teach. Open to all students of psychology as an elective. Professor Brigham.

*403. Experimental Psychology. Psychophysical methods, analysis of sensation, reaction, and study of the common senses. Lectures and work in the laboratory. Dr. Zigler, assisted by Mr. Scheck.

*404. Experimental Psychology. Special senses; space perception and illusions; higher intellectual processes. Lectures and work in the laboratory. Professor McComas, assisted by Mr. Scheck.

Equipment and Facilities for Study

The *Psychological Laboratory* is located in Nassau Hall and includes several rooms for graduate research work. The equipment includes primarily the standard pieces of apparatus, a select library of reference books and a private psychological library available to graduate students. The *Psychological Review* is edited and published at Princeton in connection with the Laboratory.

COURSES IN PRINCETON THEOLOGICAL SEMINARY

The following courses in Semitics and Greek given in Princeton Theological Seminary are open to duly qualified students of Princeton University:

1. Hebrew, 4 hours, both terms, Dr. Wilson and Dr. Allis. At 4-5 or 5-6 on Monday, Tuesday, Thursday, and Friday. Open to seniors and graduates.
2. Arabic (or, Syriac), 2 hours, both terms. Dr. Allis. Open to graduate students only. To be taken in combination with one of the hours offered in paragraph 3 below:
3. Advanced Hebrew. Open to graduate students only.
   (a) Hebrew Syntax, 1 or 2 hours, both terms, Dr. Wilson. One hour if only theoretical; 2 hours if both theoretical and practical.
   (b) Hebrew Reading, 1 or 2 hours, both terms. Dr. Wilson or Dr. Allis.
   (c) Textual Criticism, 1 or 2 hours, both terms. Knowledge of Greek and Latin required. Dr. Wilson.
   (d) Aramaic, 1 hour, both terms.
   (e) Philological premises of Old Testament Criticism, 1 hour, both terms.
4. General Introduction to the New Testament and New Testament Exegesis. Open to graduate students only. Two hours, both terms. Dr. Armstrong and Dr. Machen. (Thursday and Friday at 10.30). Together with Introduction to the Epistles of St. Paul. One hour, both terms. Thursday at 11.30. Dr. Armstrong.

SCHOOL OF ELECTRICAL ENGINEERING

MALCOLM MACLAREN, E.E., A.M., *Professor of Electrical Engineering, Chairman of the Department.*
HOWARD MCCLENAHAN, E.E., M.S., LL.D., *Professor of Physics.*
HUGH STOTT TAYLOR, D.Sc., *Assistant Professor of Physical Chemistry.*
WALTER VAN BRAAM ROBERTS, B.S., E.E., *Instructor in Electrical Engineering.*

The course in Electrical Engineering is designed to furnish instruction in the theory of electricity and in its application in the arts and industries. The course of study occupies two years of graduate work.

REQUIREMENTS FOR ADMISSION

Graduates of any accredited college will be admitted to the course in Electrical Engineering without examination, provided they have taken the requisite courses in mathematics, including calculus and elementary differential equations, general and experimental physics, and general chemistry. Applicants who have completed three years of college work or the equivalent may be admitted to the course upon passing satisfactory examinations in these subjects.

A reading knowledge of scientific French and German is desirable.

TUITION

The fee for tuition in the school of Electrical Engineering is $300 per annum.

COURSE OF STUDY

First Year

Mathematical Theory of Electricity and Magnetism. Theory of the potential; lines and tubes of force; electrostatics, dielectrics, electric images; magnetism and magnetic induction; electromagnetism; electromagnetic induction;

equations of the electromagnetic field; electromagnetic theory of light; theory of alternating currents; general equations; effects of resistance; inductance and capacity; distributed capacity; the rotating field; single and polyphase currents; high frequency currents and electrical oscillations; alternating current calculations; the symbolic method. Two exercises, about four hours per week, are devoted to this work. Professor McClenahan.

Engineering Principles and Measurement. Lectures, readings and laboratory. Particular attention is given to the theory of, and to practice in measuring, the electrical magnetic and thermal quantities. Each student is required to devote not less than two full days a week to this course. Mr. Roberts.

The Theory and Design of Direct-Current Machinery. The student is required in this course to calculate magnetization curves for a number of different types of machines, to familiarize himself with the various types of field and armature windings, and make a special study of the theory of commutation. Professor MacLaren.

During the first year an opportunity is also given to students who may be deficient in such allied subjects as Heat Engines, Strength of Materials, etc., to take suitable courses in these subjects in the Department of Civil Engineering.

Second Year

The Theory of Alternating Currents. This course embraces the mathematical theory of alternating current circuits and of alternating current machinery, including a study of the transformer, induction machines, alternating current generators, synchronous motors and polyphase systems. The course includes also lectures on modern commercial testing practice. Two exercises a week for both terms.

Alternating Current Machinery. This is a continuation of the first year course in Design and the same procedure is followed, except that the student executes designs for alternating current machines, and studies their commercial application in various industries. Two exercises a week for one term. Professor MacLaren.

Railway Engineering. This course is divided into three parts.

The first part covers a theoretical study of the principiples of locomotion, followed by the calculation of schedule speeds, power consumption, equivalent heating loads upon the motors, etc., for some representative line upon which the operating data are available for comparing results. In the second part, a series of lectures is given upon the different electrical systems in use upon interurban trolley roads. In the third part, consideration is given to some of the problems of heavy electric traction. Two exercises a week for one term. Professor MacLaren.

Electrochemistry. Two lectures a week are devoted to a consideration of the fundamental principles. The student is given special topics to work up and present to the class for discussion.

Two laboratory periods are devoted to work which illustrates important principles in theoretical and applied electrochemistry. The Electrochemical Laboratory is fully equipped for conductivity measurements and measurements of ionic velocities, and the equipment includes various types of voltameters, normal and half electrodes, etc. The work done in this laboratory on standard cells with the potentiometer, constant temperature baths, etc., furnishes a most exact basis of all E. M. F. measurements and for the determination of high temperatures with thermo-couples. A study is made of types of primary and secondary batteries, electrolytic refining of metals, and electroplating. Electric furnaces of different types are provided to illustrate some of the principal processes in electrothermics. Professor Taylor.

An extended and specialized course will be given to those who wish to devote their attention to electrochemical engineering.

Testing. The equivalent of about two days a week during the year is set apart for testing dynamos, motors, transformers, lamps, engines and boilers. A complete plant test for an all-day run is carried out each year by the students of the School.

Collateral Lectures. Lectures are given during the second half of the year on power plant design, in which the principal electrical and mechanical features involved in

the utilization of the different kinds of motive power are considered; on transmission of energy; on electric lighting, including the systems of distribution and a comparison of the different types of illuminants; and the principles and methods of photometry. Professor MacLaren.

Degree

On completion of this course the student is entitled to apply for the degree of Electrical Engineer. With his application he must present a thesis on some subject connected with electrical science.

Buildings and Apparatus of the School of Electrical Engineering

The equipment of the *Palmer Physical Laboratory* and the apparatus of the Department of Physics are available for the use of the School of Electrical Engineering. The laboratory contains a full equipment of galvanometers, current balancers, direct and alternating current ammeters, volt-meters and watt-meters; frequency and power factor meters, resistances, bridges, and potentiometers; standards of resistance, inductance and capacity; Dudell and General Electric oscillographs, a Fleming cynometer, etc.

A room has been especially equipped for the comparison with standards, of the various instruments required in precise electrical measurements.

The dynamo building contains a complete equipment of electrical machinery, and is set apart entirely for experimental work and machine testing. The dynamo plant consists of a Westinghouse alternating current generator with a full set of transformers, a Westinghouse direct current generator, two Westinghouse rotary converters, Mather, Edison, Brush arc, Eickemeyer and Gramme generators, a machine constructed in the shop of the School of Science, General Electric, Westinghouse, Brush, Eickemeyer and other motors. With these machines is a complete outfit of accessories, and a large rheostat of German silver used in testing. Arc and incandescent lamps are so arranged that the various systems of distribution may be studied.

The *University Power Plant* contains four 250, two 320,

and two 865 horse-power boilers, for power and steam heating; two 200 k.w. and one 100 k.w. direct-connected alternating current generators and one 300 k.w. alternating current generator, direct driven by a Curtis steam turbine; one motor-driven exciter and one steam turbine-driven exciter; the station switch-board and a special experimental switch-board. The entire equipment of generators, transformers, motors, etc., is available for the use of the School, for purposes of experimental study in which the quantities to be measured are of the order of those met in commercial applications.

Orson Desaix Munn University Fellowship in Electrical Engineering.—This fellowship was established in 1908 as a memorial to Orson Desaix Munn by his son, Charles A. Munn, of the Class of 1881, and Mrs. Henry Norcross Munn. It is awarded to the applicant who has made the best record in undergraduate work in Princeton, or other accredited college, and who shows the highest qualifications in respect to those subjects which are directly preparatory to the course in Electrical Engineering. It is conferred by appoinment of the Faculty, upon recommendation by the School of Electrical Engineering. All applications must be in the hands of the School of Electrical Engineering before April 15.

Sayre Fellowship in Applied Electricity.—This fellowship was founded by the bequest of the late Dr. John Stanford Sayre, of the Class of 1878. It will be awarded to that member of the senior class in Princeton University who shall pass the best examination in general physics, general chemistry, and mathematics, including elementary differential equations. The examination will be held in Princeton on or about June first.

Applications for this fellowship should be made to the School of Electrical Engineering.

SCHOOL OF ARCHITECTURE

ALLAN MARQUAND, PH.D., L.H.D., *Professor of Art and Archaeology and Director of the Museum of Historic Art.*
HOWARD CROSBY BUTLER, A.M., *Professor of the History of Architecture.*
FRANK JEWETT MATHER, JR., PH.D., L.H.D., *Marquand Professor of Art and Archaeology.*
CHARLES RUFUS MOREY, A.M., *Professor of Art and Archaeology.*
GEORGE WICKER ELDERKIN, PH.D., *Associate Professor of Art and Archaeology.*
EARL BALDWIN SMITH, PH.D., *Assistant Professor of Art and Archaeology.*
SHERLEY WARNER MORGAN, A.B., B. ARCH., *Assistant Professor of Archaeology.*
EDWIN AVERY PARK, *Assistant Professor of Architecture.*
WILLIAM WOODBURN POTTER, B.S., *Lecturer on Architecture.*
T. LESLIE SHEAR, *Lecturer on Classical Archaeology.*
ALBERT M. FRIEND, JR., *Instructor in Art and Archaeology.*
FREDERICK NEWTON WILLSON, A.M., C.E., *Professor of Graphics.*
GEORGE ERLE BEGGS, A.B., C.E., *Associate Professor of Civil Engineering.*

OFFICERS OF ADMINISTRATION

HOWARD CROSBY BUTLER, A.M., *Director.*
SHERLEY WARNER MORGAN, A.B., B.ARCH., *Secretary.*

ADVISORY BOARD OF ARCHITECTS

CHESTER ALDRICH ..... New York City
HENRY BACON ..... New York City
RALPH ADAMS CRAM ..... Boston
BURT L. FENNER ..... New York City
FREDERICK A. GODLEY ..... New York City
THOMAS HASTINGS ..... New York City
CHARLES Z. KLAUDER ..... Philadelphia
C. GRANT LA FARGE ..... New York City
BENJAMIN WISTAR MORRIS ..... New York City
S. B. P. TROWBRIDGE ..... New York City
LLOYD WARREN ..... New York City

GENERAL STATEMENT

The School of Architecture of Princeton University is designed to equip its students for the future practice of architecture as a profession, and leads to the degree of Master of

Fine Arts in Architecture. Its curriculum is based on the belief that an architect should have a well rounded education in liberal studies, that he should approach his profession primarily as an art, that he should understand and appreciate the other arts in their relation to architecture, and that he should be taught the science of building construction as a part of his training in design, rather than as an end in itself.

With this belief in view the School has been developed within the Department of Art and Archaeology and is designed primarily to coördinate the undergraduate studies of the men who elect this Department with the intention of becoming architects, to graduate them with the Bachelor of Arts degree in four years, and to fit them for the professional degree in architecture in two additional years. While based upon a thorough undergraduate preparation in the history of art, the School is open to students graduating or transferring from other colleges and universities, if they have complied, or are willing to comply, with the requirements described in a later paragraph.

The schedule provides all the courses, historical technical, and practical, which are customarily offered in architectural schools, and in addition offers a liberal education, together with a training in the history and appreciation of the allied arts which other schools may not be prepared to give.

Having a staff of critics and specialists in historical art already in the Department of Art and Archaeology, the School can give this training, in connection with the requirements for the Bachelor's degree, without increasing the number of years necessary for the degree in architecture. Quality, not numbers, is sought, and that close personal supervision of each student's work which is made possible by a student body of comparatively small size.

The work of the School moves more evenly and more rapidly and covers more ground, than is usually possible, because the students, having the Bachelor's degree in view, or behind them, possess the same foundation on which to build their architectural training. Practical details, which can be really learned only by experience in actual practice, are eliminated from the curriculum, and instead, students are required to spend two summers in the office of architects to whom they are recommended by the School. They are thus able to devote their time during the term to the acquisition of that broad

knowledge and point of view which constitute the best training a school can offer.

The design problems of the graduate years are criticised, in personal interviews with the students, by prominent architects who have consented to share each year's work in this field, and who form the Advisory Board of Architects. These visiting architects also give talks to the students, through the year, on the principles of design and the problems of the profession. Students thus receive the benefit of the experience of leaders in the actual practice of the profession for which they are fitting themselves.

In contrast to the usual plan of having only one prominent critic of design, necessarily an ardent exponent of a single style and method, the Princeton system offers the student the advantage of coming into contact with several points of view, and of receiving his theoretical training from a group of men, each of whom is eminent in one of the several different fields of modern architectural design. These architects write the programs of at least half the major competitions, and compose the juries which judge the problems. The members of the Board of Architects, who are to conduct exercises in design during the year are announced each Fall. To avoid any tendency to confusion because of different instructors, the student is given a thorough drill in the general principles of design in the courses leading up to his actual design problems, and his work is further coördinated by weekly nine-hour "sketches" given on a progressive schedule.

Visits to important buildings, both finished and in course of construction, form an additional feature of the work in design. The location of Princeton, midway between New York and Philadelphia, affords ample opportunity to inspect building operations in two great cities. Several trips for this purpose are arranged each year through the Princeton Architectural Association, an organization of alumni who are either practicing architects or vitally interested in architecture or the allied arts, and whose hearty coöperation will enable architectural students to familiarize themselves with buildings in the two cities, and with the inside workings of architects' offices. The Association is also prepared to aid in securing positions for graduates of the Princeton School and in placing students in offices for summer work.

Requirements for Admission

Students will be admitted to the School, as candidates for the degree, without examination, provided they possess a Bachelor of Arts degree from an institution whose requirements in distinctly liberal studies are similar to those of Princeton.

Students holding degrees other than that of Bachelor of Arts will be considered individually as special cases, and will be admitted if their qualifications are satisfactory. Such cases should be taken up in writing with the Director of the School.

All candidates must satisfy the language and mathematics requirements for a degree from Princeton University. Students holding degrees which do not include such studies may be admitted to the School, but will not become candidates for the degree of Master of Fine Arts until they have remedied their deficiencies by passing the courses in these subjects required of Princeton undergraduates.

It is very strongly advised that students continue their undergraduate studies in Mathematics to include the Calculus and Mechanics (Statics). For Princeton undergraduates, courses 102 and 201 of the School of Engineering are recommended for this purpose.

Especial attention is invited to the "Typical Schedules of Courses" on a later page, by which a student in Princeton University may obtain his bachelor's degree in four years, and the Master of Fine Arts in Architecture after two more years of graduate work. The required courses of the School of Architecture which also count as credits toward a Bachelor of Arts degree amount to 9 of the 20 units necessary; therefore, by matriculating in the University and taking sufficient undergraduate courses to total 20 units, when added to any credits transferred and to the 9 units to which his work in the School of Architecture entitles him, a student may secure both degrees in the minimum period of time. Details as to transfer of undergraduate credits, and as to requirements for the Bachelor of Arts degree, may be secured by consulting Part III of this Catalogue.

Requirements for Graduation

The degree of Master of Fine Arts in Architecture will be conferred on students when they have satisfactorily completed the courses described on pages 290-295. Since much of

the work is of a competitive nature, no fixed time can be set for graduation, but a student of ability and application should complete the requirements in three years, if entering without previous credit. It is intended, however, that the more elementary courses should be completed during the undergraduate years. Having done this, a student should obtain the degree of Master of Fine Arts in two years, as shown in the "Typical Schedules of Courses."

Advanced Standing

Students of Princeton University who take courses in the Department of Art and Archaeology as undergraduates will be given credit for such courses toward the degree of Master of Fine Arts, provided their average standing has been Third Group or better in the courses for which credit is asked. Students desiring credit for courses taken elsewhere must apply to the Secretary of the School of Architecture, presenting the catalogue of the institution which they have attended, and evidence of equivalent standing in the courses for which they desire credit. In the case of drawing courses, the drawings made must be submitted.

Special Students

Special students, not candidates for the degree, will be admitted to the courses of the School of Architecture only if they satisfy the Director of the School as to their fitness to follow such courses. Each case will be decided separately on its merits.

Residence, Fees, Fellowships, etc.

Students of the School of Architecture, as members of the Graduate School of Princeton University, must comply with the regulations for graduate students as given under the section of this catalogue headed "The Graduate School," and are entitled to all the privileges therein described.

Building and Equipment

The School of Architecture is at present housed in the lower floor of the Art Museum of the University, with draughting-rooms in a temporary addition. The library of the Department, one of the best equipped libraries in America on all

branches of Art, occupies the upper floor of the Museum, which also contains lecture and conference rooms, collections of paintings, statuary, etc., and the Class of 1881 Collection of Casts. The main Library of the University is also at the disposal of the students, as are the laboratories of the School of Engineering, in connection with the study of materials and construction. The School provides draughting tables and lockers, but the student must furnish his own boards, mounts, materials, etc.

Courses of Instruction

Satisfactory completion of the following courses is required for the degree of Master of Fine Arts in Architecture. Sophomore courses are numbered between 200 and 300, junior courses between 300 and 400, senior courses between 400 and 500, graduate courses from 501. Odd numbered courses are offered in First Term, even numbered in Second Term. All courses are three hours a week, unless otherwise stated.

301. Ancient Art. A general outline of the history of ancient sculpture, painting and the minor arts, from Egypt through Rome. Lectures and assigned reading. Professor Elderkin.

302. Mediaeval Art. A general history of Early Christian, Byzantine, Romanesque and Gothic sculpture, painting and minor arts. Lectures and assigned reading. Professor Morey.

303. Ancient Architecture. The history and criticism of Egyptian, Assyrian, Persian, Greek, and Roman architecture. Open to approved sophomores, and prerequisite to 407-408. Lectures and assigned reading. Professors Butler and Smith.

304. Mediaeval Architecture. The history and criticism of Early Christian, Byzantine, Romanesque and Gothic architecture. Open to approved sophomores. Prerequisite course 303. Lectures and assigned reading. Professors Butler and Smith.

305. Elements of Architecture. The orders, moldings, masonry, walls, arches, doors, windows, stairs, pediments, ceilings, roofs, vaults, domes, etc. Lectures and draughting-room periods. Professor Morgan.

306. Shades, Shadows and Rendering. Short and direct methods for determining shades and shadows on architectural features, with applications by wash rendering in India ink and

monotone. Prerequisite course, Elements of Architecture 305. Lectures and draughting-room periods. Professor Morgan.

201-b (C.E.). Descriptive Geometry. The fundamental problems of the point, line, and plane, with applications to developable and other surfaces, practically applied to the solution of problems in stereotomy on the drawing-board and in the making of models. Professor Willson.

308. Architectural Drawing. Practical training in the use of draughting instruments, in lettering and in drawing in pencil, pen and ink. Instruction will consist of the criticism of work done in the classroom under the personal supervision of the instructor. Professor Park.

401. Renaissance Sculpture. A general treatment of sculpture from the end of the Middle Ages to modern times. Prerequisite: one of the junior courses in Art. Professors Morey and Smith.

402. Greek Sculpture. The technique, forms, composition and development of Greek sculpture. Lectures and assigned reading. Professor Elderkin.

403. The Revival of Painting in Italy. The history and criticism of painting in Italy from Cavallini to Michelangelo, with special regard to the Florentine School. Lectures and reading. Professors Mather and Smith.

404. Modern Painting. The development of painting will be traced chiefly in France and England, with its precursors in the 17th century, to the year 1900. Artistic movements and their cognate tendencies in literature and politics. The growth of romanticism and its sequels in realism and impressionism. Lectures and assigned reading. Professor Smith.

405, 406. Classical Architecture. The detailed study of the architecture of the Greeks and Romans in its historical development in antiquity and the Renaissance. Colonial, Neoclassic, and modern architecture. Open to approved juniors. Prerequisite course Ancient Architecture 303. Lectures and reading. Professor Butler.

407. Perspective and Indication. The science of drawing in perspective, and its application to architectural presentation by the shortest and most direct methods, including the pictorial treatment of the finished drawing. Prerequisite courses 305, 306. Lectures and drawing periods. Professor Morgan.

408. Applied Elements. The theory of architectural design and the application of Classic architectural principles to

the solution of problems in design suitable to beginners. Prerequisite courses 305, 306 and 307. Lectures and drawing periods. Professor Morgan.

409, 410. Freehand Drawing. The first term is devoted to drawing in charcoal from the cast and from nature with especial attention to architectural subjects, and the second to watercolor work, including sketching out of doors. Open to approved students only. Prerequisite courses 305, 306, 308. Professor Park.

501. Elementary Design.
502. Intermediate Design.
503, 504. Advanced Design and Thesis. } The courses in design consist of the solution of major and minor problems, under the supervision of the staff of the School and of the visiting critics. The problems are judged in competition, with the students' names covered, by a jury of visiting architects, and points are credited to the students on the basis of the awards of the jury. Twenty-four points are required in Elementary and Intermediate Design, and thirty-six in Advanced Design to complete the course. A student must obtain the required number of points in each grade before entering the next higher grade, no time limit being set for the separate courses, except that points will not count toward the completion of any course when over one year old.

No student may carry forward for credit in a higher grade more than three points which he has obtained in excess of the requirements of a lower grade, unless his last problem in a grade has received one of the higher awards, in which case the extra points thus gained will also be credited in the succeeding grade. No student may advance from one grade to another until he has completed for judgment at least two major and six minor problems in the grade, regardless of the number of points he may have obtained.

The various awards and their point values are as follows:

	Elem. and Inter. Design		*Advanced Design*	
Major Problems	Mention	6	Mention	6
	1st Mention	7	2nd Medal	7
	1st Mention Placed	8	1st Medal	8
Minor Problems	Mention	2	Mention	3
	3rd Medal	3	3rd Medal	2

Judgments usually are held the day following the comple-

tion of the problem, and the results published immediately. The jury will award a "mention" to every drawing which in their opinion satisfactorily complies with the conditions of the program. Drawings which fall below the required standard will be marked with an "X" and the number of points awarded, if any. No drawings will be accepted, or submitted to the jury for judgment, which are not delivered at the time set on the day on which the problem is due.

Three major and ten minor problems will ordinarily be issued each term in each grade of design. A list of dates for the year is furnished to students in residence.

Major problems will occupy at least four weeks, and will consist of the "esquisse" and the "rendu." The "esquisse" must be completed within nine consecutive hours after the program is issued to the student. It will show roughly the scheme for the solution of the problem which the student has adopted, and the development of which, through study and criticism, will form the basis of the complete final drawings or "rendu." No changes from the "esquisse" will be permitted, except in proportion or detail, in working out the final solution of the problem.

Minor problems, or "esquisse-esquisses" consist in the complete solution of an architectural problem within nine consecutive hours, by a roughly finished drawing.

The thesis is a larger and more important major problem on a program written by the student, subject to the approval of the staff of the School. Eight weeks are devoted to it, after the completion of Advanced Design.

Both "esquisses" and "esquisse-esquisses" are taken "en loge"—that is, the student is not permitted to consult documents of any sort, or to receive advice from the instructors. His "parti," or scheme, must be his own unaided conception. He may, however, discuss the program with other students.

Instruction in design will consist of lectures and of individual criticism of the student's work, at his drawing board. Each student is assigned to a member of the staff of the School for immediate supervision of his work in design, and all receive frequent criticism from the prominent architects who take charge of four of each year's problems in each grade. These visiting architects write and supervise two problems each term, choosing their subjects from the fields which are their specialties. During their terms as critics they give the

students talks on the practical problems of the profession, as well as affording the inspiration which comes from working under men of nation-wide reputation, who are actually putting their designs into execution.

At least one problem each term will be based on the programs of the Beaux Arts Institute of Design, and will be judged and exhibited by the Institute in New York, in competition with drawings from other schools of architecture and ateliers throughout the United States and Canada.

505, 506. Freehand Drawing. Two four-hour periods a week throughout the year of drawing in charcoal, pen and ink, and watercolor, under the supervision and criticism of the instructor. Professor Park.

507. Life-Drawing and Modelling. Drawing in charcoal from life, and modelling of architectural forms and ornament, including the models of buildings. Six hours a week. Professor Park.

509, 510, 511. Ornament and Decoration. The study of ornamental styles, the origin of ornamental motives, and of the application of ornament in Egyptian, Assyrian, Pre-Hellenic, Greek, Persian, Roman, Early Christian, Byzantine, Romanesque, Gothic, Renaissance and Modern Art. Lectures, reading and drawing; 4 hours a week. Professor Smith.

512. The Design of Ornament. Two four-hour periods per week during the last half-year devoted to the designing of ornamental features, and the study of their details at large scale in various media, under the criticism of the staff of the School in their special fields.

513. The Mechanical Equipment of Buildings. Sanitation, sewage disposal, plumbing, ventilation, heating, lighting, wiring and power plants. Mr. Potter.

514. Contracts and Specifications. The law of contracts as it applies to architects, their clients, and their contractors, and the methods of writing specifications and letting bids, etc. Mr. Potter.

515, 516. Building Materials and Construction. The properties and tests of building materials, and standard methods of construction. Timber, stone, brick, concrete, terracotta, and steel, and their employment in carpentry, slow-burning, and fire-proof construction, with the preparation of working drawings; 4 hours a week. Professor Morgan.

517, 518. Structural Design. The design of beams, col-

umns, girders, roof trusses, piers, foundations, etc., considered theoretically and applied to the solution of practical problems in construction; 4 hours a week. Professor Beggs.

519, 520. Development of Styles. Intensive study of the growth of styles and their characteristics, during the Early Christian, Byzantine and Romanesque periods. Two hours a week. Professor Butler.

521, 522. Development of Styles. Intensive study of the growth, monuments and characteristics of the Gothic and succeeding styles in France, England, Spain, Italy and Germany. Professor Butler.

Each student is also required to attend the weekly lectures given by the critics of design, to spend at least one month during each of two summer vacations in the office of some practising architect, and to produce a satisfactory number of outdoor sketches of architectural subjects.

Typical Schedules of Courses

I.

Schedule for a student enrolled in Princeton University as candidate for the degree of Bachelor of Arts on graduation, and for the degree of Master of Fine Arts in Architecture after two years of graduate work.

The numbers preceding the titles of courses refer to the descriptions already listed. Five courses each term for four years are required for a bachelor's degree.

Sophomore Year

1st Term	*2nd Term*
303. Ancient Architecture	304. Mediaeval Architecture
201b. (C.E.) Descriptive Geometry	308. Architectural Drawing
Three electives	Three electives.

(Recommended electives—English, French and Mathematics.)

Junior Year

301. Ancient Art	302. Mediaeval Art
305. Elements of Architecture	306. Shades, Shadows and Rendering
405. Classical Architecture	406. Renaissance and Modern Architecture
Two electives	Two electives

(Recommended electives—Economics and History.)

Senior Year

401.	Renaissance Sculpture	402.	Greek Sculpture
403.	Italian Painting	404.	Modern Painting
407.	Perspective and Indication	408.	Applied Elements
409.	Freehand Drawing (Charcoal)	410.	Freehand Drawing (Watercolor)
	One elective		One elective

First Graduate Year

NOTE.—The figures following the titles of graduate courses indicate the actual number of hours a week that the student is expected to devote to the course, including lectures, recitations, drawing and study, and will, of course, vary somewhat according to the individual.

501.	Elementary Design	24		502.	Intermediate Design	24	
505.	Freehand Drawing	8		506.	Freehand Drawing	8	
509.	Ornament and Decoration	4		510.	Ornament and Decoration	4	
515.	Building Materials	4		516.	Building Materials	4	
517.	Structural Design	4		518.	Structural Design	4	
519.	Development of Styles.	2		520.	Development of Styles	2	
			46				46

Second Graduate Year

503.	Advanced Design	30		504.	Advanced Design and Thesis	32	
507.	Freehand Drawing	6		512.	Design of Ornament	8	
511.	Ornament and Decoration	4		514.	Contracts and Specifications	3	
513.	Mechanical Equipment of Buildings	3		522.	Development of Styles.	3	
521.	Development of Styles	3					46
			46				

II.

Schedule for a student in Princeton University who has not begun the study of architecture in sophomore year, but who wishes to receive the degree of Bachelor of Arts on graduation and the degree of Master of Fine Arts in Architecture after two years of graduate work.

Junior Year

301.	Ancient Art	302.	Mediaeval Art
303.	Ancient Architecture	304.	Mediaeval Architecture
305.	Elements of Architecture	306.	Shades, Shadows and Rendering
201.	(C.E.) Descriptive Geometry		Two electives
	One elective		

Senior Year

401.	Renaissance Sculpture	402.	Greek Sculpture
403.	Italian Painting	404.	Modern Painting
405.	Classical Architecture	406.	Renaissance and Modern Architecture
407.	Perspective and Indication	408.	Applied Elements
409.	Freehand Drawing (Charcoal)	410.	Freehand Drawing (Watercolor)

The two graduate years are the same as in Schedule I, the student having completed his undergraduate work in two years instead of three by devoting more time to strictly departmental studies.

III.

Schedule for a student entering the School as a candidate for the degree of Master of Fine Arts in Architecture without previous study in architecture (see Requirements for Admission). This schedule requires the strictest application and the average student will need three years and a half to complete the work, unless he receives credit for several courses at entrance.

First Graduate Year

301.	Ancient Art	5	302.	Mediaeval Art	5
303.	Ancient Architecture	5	304.	Mediaeval Architecture	5
305.	Elements of Architecture	16	306.	Applied Elements	20
407.	Perspective and Indication	8	408.	Shades, Shadows and Rendering	8
409.	Freehand Drawing (Charcoal)	6	410.	Freehand Drawing (Watercolor)	8
201b.	(C.E.) Descriptive Geometry	6	516.	Building Materials	5
515.	Building Materials	3			51
		51			

Second Graduate Year

401.	Renaissance Sculpture.	5	402.	Greek Sculpture	5
405.	Classical Architecture.	5	406.	Renaissance and Modern Architecture	5
501.	Elementary Design	24	502.	Intermediate Design	24
505.	Freehand Drawing	6	506.	Freehand Drawing	6
509.	Ornament and Decoration	4	510.	Ornament and Decoration	4
517.	Structural Design	5	518.	Structural Design	5
519.	Development of Styles.	2	520.	Development of Styles.	2
		51			51

Third Graduate Year

403.	Italian Painting	5	404.	Renaissance and Modern Painting	5
503.	Advanced Design	30	504.	Advanced Design and Thesis	32
507.	Freehand Drawing	6	512.	Design of Ornament...	8
511.	Ornament and Decoration	4	514.	Contracts and Specifications	4
513.	Mechanical Equipment of Buildings	4	522.	Development of Styles.	3
521.	Development of Styles.	3			
		52			52

PART X

DEGREES AND HONORS, 1920-1921

DEGREES CONFERRED, 1920-1921

DEGREES IN COURSE CONFERRED OCTOBER 28, 1920

A.M.—James Henry Taylor, *B.S. University of Nebraska, 1916.*
A.M.—James Cutler Vickery, *B.S. Princeton University, 1916.*
A.B.—Laurence Milton Sears, as of the Class of 1919.
A.B.—Frederick R. Warburton, as of the Class of 1919.
A.B.—Arthur Paige Baskerville, as of the Class of 1920.
A.B.—Dexter Preston Swaney, as of the Class of 1920.
B.S.—James Hervey Ackerman, as of the Class of 1919.
B.S.—Bryan Flemming, as of the Class of 1920.

DEGREES IN COURSE CONFERRED APRIL 14, 1921

Ph.D.—Robert Norton Pease, *B.S. University of Vermont, 1916.*
Ph.D.—Henry DeWolf Smyth, *A.B. Princeton University, 1918.*
A.M.—Horace Emery Hoover, *B.S. Grove City College, 1918.*
A.M.—Sidney Warren Prince, *A.B. Colgate University, 1917.*
A.M.—Shirley Donald Southworth, *A.B. Princeton University, 1920.*
A.B.—Harold James Ash, as of the Class of 1920.
A.B.—Henry Franklin Butler, as of the Class of 1920.
A.B.—Walter Franklin Chappell, Jr., as of the Class of 1920.
A.B.—Harry Andrews Farr, as of the Class of 1920.
A.B.—Frank Albert Gold, as of the Class of 1920.
A.B.—George Elton Greenleaf, as of the Class of 1920.
A.B.—Harold Jasper Hunt, as of the Class of 1920.
A.B.—James Edward Johnston, as of the Class of 1920.
A.B.—Charles Russell MacGregor, as of the Class of 1920.
A.B.—Herbert Garton Moore, as of the Class of 1920.
A.B.—Bernhard Karsch Schaefer, as of the Class of 1920.
A.B.—Elliott Speer, as of the Class of 1920.
A.B.—Harold Amerman Sutphen, as of the Class of 1920.
A.B.—William Reade Kirkland Taylor, Jr., as of the Class of 1920.
A.B.—Frederick Thiesing Yieser, as of the Class of 1920.
B.S.—Henry Booth Campbell, as of the Class of 1920.
B.S.—Stanley Grover Netts, as of the Class of 1920.
B.S.—Carl Joseph Vanderlin, as of the Class of 1920.
C.E.—Donal Lee Chamberlin, as of the Class of 1920.
C.E.—Alfred Hyde Clarke, as of the Class of 1920.
C.E.—John Porter Gillespie, as of the Class of 1920.

HONORARY DEGREES CONFERRED JUNE 21, 1921

MASTER OF FINE ARTS
Christopher Grant LaFarge

DOCTOR OF DIVINITY
John Kelman

DOCTORS OF LAWS
James Rowland Angell
Roland Sletor Morris

DEGREES IN COURSE CONFERRED JUNE 21, 1921

DOCTOR OF PHILOSOPHY (PH.D.) 12

John Dean Bickford, *A.B. Princeton University, 1911; A.M. Princeton University, 1914.* Subject: Classics. Thesis: "The Soliloquy in Ancient Comedy."

Robert Martin Burns, A.B. *University of Colorado, 1915; A.M. University of Colorado, 1916.* Subject: Chemistry. Thesis: "The Adsorption of Gases by Metallic Catalysis."

Gregg Dougherty, *B.S. Princeton University, 1917; A.M. Princeton University, 1919.* Subject: Chemistry. Thesis: "Studies in the Hydrogenation of Benzene."

William Willard Flint, Jr., *A.B. Dartmouth College, 1912; A.M. Princeton University, 1913.* Subject: Classics. Thesis: "The Element of Suspense in Extant Greek Tragedy."

Philip Franklin, *B.S. College of the City of New York, 1918; A.M. Princeton University, 1920.* Subject: Mathematics. Thesis: "The Four Color Problem."

George Shelton Hubbell, *A.B. Wesleyan University, 1916; A.M. Wesleyan University, 1917.* Subject: English. Thesis: "King Alfred's Translation of Boethius' Consolation of Philosophy."

Charles DeWitt Hurd, *B.S. Syracuse University, 1918.* Subject: Chemistry. Thesis: "Rearrangements of Some New Hydroxamic Acids Related to Heterocyclic Acids, and to Diphenyl, and Triphenyl Acetic Acids."

Orren Williams Hyman, *A.B. University of North Carolina, 1910; A.M. University of North Carolina, 1911.* Subject: Biology. Thesis: "Dimorphism of The Spermatozoa of Fasciolaria Tulipa."

James Dow McCallum, *A.B. Columbia University, 1914; A.M. Columbia University, 1915.* Subject: English. Thesis: "Lord Morley's Criticism of English Poetry and Prose."

Harvey Alexander Neville, *A.B. Randolph Macon College, 1918; A.M. Princeton University, 1920.* Subject: Chemistry. Thesis: "Catalysis in the Interaction of Carbon with Steam and with Carbon Dioxide."

Emerson Howland Swift, *A.B. Williams College, 1912; A.M. Princeton University, 1916.* Subject: Classics and Archaeology. Thesis: "A Group of Roman Imperial Portraits at Corinth;—The Neo-Attic School in Greece."

Frederick Courtney Tarr, *A.B. Johns Hopkins University, 1915; A.M. Johns Hopkins University, 1917.* Subject: Romance Languages. Thesis: Prepositional Complementary Clauses in Galdós with an Outline of the Historical Development of the Construction."

MASTER OF FINE ARTS (M.F.A.) 2

Rolf William Bauhan, *A.B. Princeton University, 1914; A.M. Princeton University, 1920.* School of Architecture.

Henry John Burden, *B.A.Sc. University of Toronto, 1915.* School of Architecture.

MASTER OF ARTS ON EXAMINATION (A.M.) 36

William Whipple Bennett, *A.B. Doane College, 1919.* Economics and Social Institutions.
James Douglas Brown, *A.B. Princeton University, 1919.* Economics and Social Institutions.
John Dales Buchanan, *A.B. Monument College, 1915.* Psychology.
Richard Folsom Cleveland, *A.B. Princeton University, 1920.* History and Politics.
Charles du Bus de Warnaffe, *Doctor of Law, Louvain University, 1920.* History and Politics.
Waldemar Oswald Doescher, *A.B. Capital University, 1918.* Philosophy.
Ora Stanley Duffendack, *B.S. University of Chicago, 1917.* Physics.
William Alfred Eddy, *Litt.B. Princeton University, 1917.* English.
Marshall Lowndes Edgar, *A.B. Princeton University, 1917.* English.
Calvin Pardee Erdman, *A.B. Princeton University, 1915.* English.
Arthur Louis Faubel, *B.S. New York University, 1919.* Economics and Social Institutions.
Kenneth Joseph Foreman, *A.B. Davidson College, 1911.* Non-Departmental.
Jean Frois-Wittman, *Lycée Henri IV., Paris. Ecole des Beaux-Arts, Paris.* Philosophy.
Charles Gerlinger, *A.B. Macalaster College, 1917.* Psychology.
George McLean Harper, Jr., *A.B., Princeton University, 1920.* Classics.
Gladstone Bering Heisig, *A.B. Rice Institute, 1917; M.S., Rice Institute, 1918.* Chemistry.
Stephen Joseph Herben, Jr., *Litt.B., Rutgers College, 1920.* English.
Harris Gregg Hilscher, *A.B., College of Emporia, 1919.* English.
Howard Algernon Jones, *B.S., Pennsylvania State College, 1918.* Chemistry.
Keigaku Kakuda, *North Japan College (Japan), 1914.* Philosophy.
John Spalding Kramer, *A.B. Trinity College (Conn.), 1917.* Economics and Social Institutions.
Philip Miller Kretschmann, *A.B. Princeton University, 1919.* Philosophy.
David Hunter McAlpin, III, *A.B. Princeton University, 1920.* History and Politics.
Alpheus Thomas Mason, *A.B. Dickinson College, 1920.* History and Politics.
Arthur Prichard Moor, *B.S. John B. Stetson University, 1919.* English.
Murat Halstead Roberts, *A.B. University of Tennessee, 1915.* Modern Languages.
Maurice Rogers, *B.S. Princeton University, 1920.* Chemistry.
Robert Samuel Rogers, *A.B. University of Pennsylvania, 1920.* Classics.
John Alexander Sawhill, *A.B. University of Colorado, 1917.* Classics.
James Buchanan Trant, *A.B. Howard College (Ala.), 1920.* Economics and Social Institutions.
Paul van Zeeland, *Doctor in Law, Louvain University, 1920.* Economics and Social Institutions.

Harold Rollin Wanless, *B.S. Princeton University, 1920.* Geology.
Arthur Kent White, *A.B. Columbia University, 1915.* English.
Ray Bridwell White, *A.B. Columbia University, 1917.* English.
Edward Van Dyke Wight, Jr., *A.B. Princeton University, 1920.* Economics and Social Institutions.
Yu Tai Yao, *B.S. University of Chicago, 1917.* Physics.

MASTER OF SCIENCE ON EXAMINATION (M.Sc.) 3

Walter Herman Beisler, *B.S. Rutgers College, 1918; M.S. Rutgers College, 1919.* Chemistry.
Edward Houghton Kurth, *C.E. Princeton University, 1920.* Physics.
Anson Willard Voorhees, *B.S. Rutgers College, 1920.* Geology.

ELECTRICAL ENGINEER (E.E.) 1

Henry Askew Barton.

BACHELOR OF ARTS (A.B.) 229

AS OF THE CLASS OF 1917

Joseph Morschauser, Jr.

AS OF THE CLASS OF 1918

John Stafford Cromelin
Donald McLennan

AS OF THE CLASS OF 1919

Edwin Stanton Bayer
Samuel Lloyd, Jr.
James Kellogg Burnham Hockaday

AS OF THE CLASS OF 1920

Harold Sherman Bond
Harold Frederick Brigham
Stuart Chapin
Bertram Faupel Crane
Fletcher Slee Crocker
Wellington Shelton Crouse
Joseph William Durbin
Janon Fisher, Jr.
Charles Irving Foster
Milton Joseph Offutt
Peter Pagano
D'Arcy Parrott
Harry Robeson Perley

CLASS OF 1921

Douglas Hamilton Alexander
James Allison
George Carl Arvid Anderson
James Howard Ardrey, Jr.
Cedric Underhill Atkinson
Walter Browne Baker
William Lyttleton Barclay, Jr.
Brandon Barringer
Tyler McKim Bartow
Julius M. Benson
William Ellsbury Benua
George Packer Berry
Joshua Isham Bliss
William Bolton, Jr.
Francis Bartow Bowman
John Craig Brackin
Rodney Lee Brandt
Benjamin Harris Brewster, III
Benjamin Nields Brown
Gregory Nathan Brown
George Plumer Bryan
Julien Hequembourg Bryan
Robert Stephen Burgher
Lloyd Spencer Burns
Henry Augustine Callahan
Andrew Galbraith Carey
Charles Colcock Jones Carpenter
Joseph Carson, Jr.

Charles Merrill Chapin, Jr.
Gill Cisco-Smith
Howard George Clark
John Lewis Cochran, Jr.
James Conner
Robert Wilder Cossum
Loring Andrews Cover, Jr.
Stephen Brearley Creasey
Joseph Dennehy Croll
Cecil Idell Crouse
John Shelton Curtiss
Lewis Meriwether Dabney, Jr.
John Rock Daniell
John Young Dater, Jr.
Arthur Paul Davis
John Ethelbert Davis
Philip Haldane Davis
Junius Simpson Dean
Robert Denniston, Jr.
Collins Denny, Jr.
Jean Paul Dixon
Frank M. Donohue, Jr.
Hugh McPherson Driscoll
Foster Rhea Dulles
Richard Michael Ehret
William Hamilton English, Jr.
Thomas Davis Ewing
Arthur Lawrence Fagan
John Hewlett Fawcett
William Cramp Ferguson, Jr.
George Gross Finney
Irvine Moore Flinn, Jr.
Walter Frederic Folmer
Paul Victor Forster
Case Alexander Foster, Jr.
Reginald Hayden Foster
Harry Burrows Gaffney
Nelson Davis Gifford, Jr.
John Gilfillan
William Calvin Gotshalk, Jr.
Wendell William Greenlee
Frederick Henry Groel
Austin Philip Guiles
Richard Allen Haight
Charles Huston Haines
Stuart Eldridge Hall
Richard Halliburton
Norman Walter Haring
Henry Charles Philip Harth
Dalton Hayes
Harold Helm
Edward Tarr Herndon
Edwin Harvey Herzog
Joel Milan Hill
John Bickel Holman
David Luke Hopkins
John Livingston Hopkins
Russell Hopkinson
William Hughes
George Richard Hunter
Ralph Walshaw Illingworth, Jr.
George Smyser Jeffers
McClure Kelley
Edmund Bredow Kelly
Ralph Edward Kent
Richard Bruce King
Richard Dale Kitz-Miller
Kenneth Hampton Klipstein
Alan Gordon Knox
James McCauley Landis
Reginald Norcom Lawrence
Armant Legendre
John Henry Leh
Edward Park Curtis Lewis
Richard Vliet Lindabury, Jr.
Robert Brodhead Litch
Alan Spangler Loose
Charles August Luft
Benjamin Brandreth McAlpin, Jr.
William Urie McClenahan
Alexander Meredith MacColl
Alfred McCormack
Fowler McCormick
Gordon McCulloh
Robert Manning McCulloch
Hugh Deane McKinnon
Robert McLaughlin
Douglas Edmund McWilliams
Herbert Stanley Margetts
Miner Carey Markham
Henry Bartlett Martz
Harrison Freeman Matthews
Charles William Mayo
Varnum Cleveland Mead
Richard Earl Merrifield
Rowland South Metzger
Edward Bailey Meyer
Morton Meyer
Kenneth Byron Miller
Lloyd Samuel Miller
Robert Murdoch Miller
William Birney Mills
Joseph Dubbs Mish
Charles Joseph Molloy

David Dodge Moore
John Leonard Moore
Arthur Harrison Mulford, Jr.
Beverley Bland Munford
Gilbert Donald Murray, Jr.
Alfred Nicholson
Henry Stuart Norris
James Franklin Oates, Jr.
Howard Reinoehl Opie
Benjamin Henry Paddock
Thomas Ferguson Paddock
Thornton Bancroft Penfield, Jr.
Truman Colman Penney
Edward Ritzema Perry
John Pershing
George Shotwell Piper
Bernard Robert Press
Meredith Howland Pyne
Earl Fox Rahn
Allan Walter Rank
Aiken Reichner
Otto Berend Reimer
Charles Elbert Rhodes, Jr.
Robert Peebles Rhodes
Thomas Chambers Roberts
Wilbourn Thomas Robinson
John Ewing Russell
Richard Bowman Ruth
Charles Edmund St. John
Harvey Miller Scarborough
Richard Wallace Schabacker
Robert Schirmer
Charles Hosmer Scribner, Jr.
Murray Smith Scureman
Eugene Webster Sharp
Sidney Morgan Shea
Charles Edward Skinner, Jr.
Alexander Notman Sloan, Jr.
Lorimer Bergland Slocum
Joseph Hopkinson Smith
Theodore Cuyler Speers
Edward Thomas Stein
George Robert Stephens
Richard Stillwell
William McIver Streetman
William McCreery Strong
Channing Fullerton Sweet
Paul Hoag Taber
Irwin Logan Tappen
William Thomas Thach
Newell Elliott Thomas
Marshall Alexander Thompson
Rodwell Todd
Cornelius Polhemus Trowbridge
Robert James Upson
James Galbraith Vermillion
Andre Louis Vigneras
Harold Reinoehl Walley
Philip Wallis
Edward Everett Watts, Jr.
Burton Mallory Webb
Archibald Wilson Webster
Edwin Hanson Webster
Emmanuel Adam Weishaar
Francis Woodruff West
Edward Hooper Wever
Philip Ellis Wheelwright
John Howard Whelen, Jr.
Scott Alexander White, Jr.
Allan Dudley Wilcox
Henry Symmes Wilson
Lawrence Liston Witherill
Arnold Wood, Jr.
Clinton Tyler Wood, Jr.
Horace Elmer Wood, 2nd
Benjamin Snow Woodworth
Elijah Floyd Wright, Jr.
Walter Livingston Wright, Jr.

BACHELOR OF SCIENCE (B.S.) 60

AS OF THE CLASS OF 1920

William Theodore Anderson, Jr.
John Brook, Jr.
Alden Rogers
Carl Victor Sandell
James Rich Steers, Jr.
John Graham Watson

CLASS OF 1921

Livingston Boyd Baily
Edward Lowry Barbee
Daniel Moreau Barringer
Robert Mooney Bitten
Robert William Bluntschli
John Mitchell Brush
John Robert Campbell, Jr.
Emerson Cornelius Conner

Earnshaw Cook
Victor Munroe Covington
Walter Arthur Dew
William Rush Farr
Henry Fink
Donald Blair Foresman
George Wood Furness
Claude Gortatowsky
Charles Day Halsey, Jr.
James Hartshorne
Irving Oty Hockaday
Frank Evans Hoge
John William Hornsey, Jr.
Evan O'Neill Kane, Jr.
Paul Edgar Kennedy
Edward Lawrence Keyes, III
Paul Joseph Leavens
Philip Leighton Lee
Roderick Stanley Lewis
John Dinsmore McCaull
James Smith McDonnell, Jr.
John Donald McKinney
Alva Edison Mallory
Watt Reynolds Matthews
John Ainsworth Morgan
Everts Moulton
John Hutchins Neher
Robert Russell Osborne
Herbert Orvis Peet
Junius Mott Rawlings
Harmar Denny Roberts
Samuel Davis Robins
William Rogers, Jr.
James Penfield Seiberling
James Bond Skidmore
Frederick Craig Squier, Jr.
Arthur Stull
David Adams Uebelacker
Thomas Van Orden Urmy
Miles Hodsdon Vernon
Thomas Jacob Shryock Waxter
Henry Hunter Welles, 3rd
Francis Parker White
John Lawrence Woodside
William A. Stone Wright
William Isleworth Zabriskie

CIVIL ENGINEERS (C.E.) 15

AS OF THE CLASS OF 1919

Edmond Thomas Keenan
Roswell Miller

AS OF THE CLASS OF 1920

Charles Porter Elgin
Milton Darlington Moore
Evan Thomas Fisher

CLASS OF 1921

Thomas Harold Benedict
Alonzo Edward Conover, Jr.
Gordon Heys Curtis
Patrick Deluca
Frank Samuel Grandin
Nathaniel Knowles, Jr.
Ellis Hughes Martin
Henry Howard Allen Morris
James Walter Murray
Warren Butler Shipway

HONORS CONFERRED 1920-1921

LATIN SALUTATORY
James McCauley Landis

VALEDICTORY
Joseph Carson, Jr.

FINAL SPECIAL HONORS

CLASSICS

Highest Honors—Joseph Morschauser, Jr.
High Honors—Philip Haldane Davis.

MODERN LANGUAGES

Highest Honors—Joseph Carson, Jr.
High Honors—Richard Vliet Lindabury, Jr., Meredith Howland Pyne.
Honors—Charles August Luft.

ECONOMICS AND SOCIAL INSTITUTIONS

High Honors—Brandon Barringer, Harry Burrows Gaffney, John Henry Leh, Richard Wallace Schabacker.
Honors—Hugh McPherson Driscoll, Henry Stuart Norris, Truman Coleman Penney, Harry Robeson Perley, Charles Elbert Rhodes, Jr.

ENGLISH

High Honors—Alexander Notman Sloan, Jr., Joseph Hopkinson Smith, Harold Reinoehl Walley.
Honors—Howard George Clark, Thomas Davis Ewing, Alfred Nicholson, Benjamin Snow Woodworth.

ART AND ARCHAEOLOGY

High Honors—Norman Walter Haring, Henry Charles Philip Harth.
Honors—Robert McLaughlin, Richard Stillwell.

HISTORY AND POLITICS

Highest Honors—James McCauley Landis.
High Honors—Wellington Shelton Crouse, John Young Dater, Jr., Collins Denny, Jr., William Calvin Gotshalk, Jr., Philip Wallis, Archibald Wilson Webster.
Honors—Foster Rhea Dulles, Beverley Bland Munford, Sidney Morgan Shea, Walter Livingston Wright, Jr.

PHYSICS

Honors—James Smith McDonnell, Jr., Frederick Craig Squier, Jr.

CHEMISTRY

High Honors—William Theodore Anderson, Jr., William Rogers, Jr.

BIOLOGY

Highest Honors—George Packer Berry.
High Honors—Jean Paul Dixon, Junius Mott Rawlings.
Honors—John Leonard Moore, David Dodge Moore, Irvine Moore Flinn, Jr.

GEOLOGY

High Honors—Horace Elmer Wood, 2nd.
Honors—Robert Russell Osborne.

CIVIL ENGINEERING

High Honors—Alonzo Edward Conover, Jr., Patrick Deluca.
Honors—Frank Samuel Grandin, Warren Butler Shipway.

PHILOSOPHY

Highest Honors—Joseph Carson, Jr.
High Honors—Philip Ellis Wheelwright.

SENIOR PRIZEMEN

THE ALEXANDER GUTHRIE MCCOSH PRIZE

Paul Victor Forster
Honorable Mention—Philip Ellis Wheelwright

THE CLASS OF 1859 PRIZE

Philip Haldane Davis
Honorable Mention—Howard George Clark

THE CLASS OF 1869 PRIZE IN ETHICS

James McCauley Landis
Honorable Mention—Alexander Notman Sloan, Jr.

THE LYNDE DEBATE PRIZES

First—Frederick Henry Groel
Second—Alfred McCormack
Third—Thomas Davis Ewing

THE CLASS OF 1876 MEMORIAL PRIZE

James McCauley Landis

THE FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE

Robert McLaughlin

THE GEORGE POTTS BIBLE PRIZE

A. Philip Guiles

CLASS OF 1870 PRIZE IN OLD ENGLISH
Harold Reinoehl Walley
Honorable Mention—Alexander Notman Sloan, Jr.

MANNERS PRIZE
Winner of the Golden Tiger—Ralph Edward Kent.

CLASS OF 1873 FELLOWSHIP IN ENGLISH
Harold Reinoehl Walley

LAWRENCE HUTTON PRIZE IN HISTORY
Archibald Wilson Webster

CLASS OF 1895 MILITARY PRIZE
Walter A. Dew
Honorable Mention—Richard Stillwell

JUNIOR PRIZEMEN

THE DICKINSON PRIZE
Franklin Perry Schofield

THE MARY CUNNINGHAM HUMPHREYS JUNIOR GERMAN PRIZES
First—John Franklin McCoy, Jr.
Second—No award.

THE JUNIOR ORATOR MEDALS
First—Rollin Miles Warner
Second—Burnham Carter
Third—Robert Hargest Scholl
Fourth—Robert Barlet Bradshaw

THE MACLEAN PRIZE
Burnham Carter

THE THOMAS B. WANAMAKER ENGLISH LANGUAGE PRIZE
Charles Edward Hopkin
Honorable Mention—Thomas McCamant

ALDEN MEMORIAL PRIZES IN FRENCH
First—Henry Carlton Hart
Second—Alexander Simpson

THE CLASS OF 1870 JUNIOR PRIZE IN ENGLISH
Divided between Hamilton Cottier and Hubbard Vail Motter

SOPHOMORE PRIZEMEN

THE CLASS OF 1861 PRIZE
Alexander Logan Wilson

THE CLASS OF 1870 SOPHOMORE ENGLISH PRIZE
Van Dusen Rickert, Jr.
Honorable Mention—Donald A. Stauffer

THE FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE
George Loveland Ridgeway
Honorable Mention—Robert Hamilton Ball

THE STINNECKE SCHOLARSHIP
Van Dusen Rickert, Jr.

FRESHMAN PRIZEMEN

THE CLASS OF 1883 ENGLISH PRIZE FOR FRESHMEN IN THE SCHOOL OF SCIENCE
James Patten Newell, Jr.

PART XI

NATIONAL ALUMNI ASSOCIATION AND GRADUATE COUNCIL, ALUMNI ASSOCIATIONS, ALUMNI REPRESENTATION

NATIONAL ALUMNI ASSOCIATION OF PRINCETON UNIVERSITY

THE GRADUATE COUNCIL

Chairman: Francis G. Landon, 60 Broadway, New York, N. Y.
Vice-Chairman: Andrew C. Imbrie, 320 Broadway, New York, N. Y.
Secretary: V. Lansing Collins, Princeton, N. J.

Committee on Finance. Chairman: Walter L. Johnson '97, 71 Broadway, New York, N. Y.

Committee on Class Records and Organization. Chairman: Frederick P. King '00, 160 Broadway, New York, N. Y.

Committee on Schools. Chairman: Henry M. Canby '95, Equitable Bldg., Wilmington, Del.

Committee on Publicity. Chairman: Roy S. Durstine '08, 25 West 45th Street, New York, N. Y.

Committee on Undergraduate Activities. Chairman: John Colt '14, 162 Mercer Street, Princeton, N. J.

Committee on Alumni Associations. Chairman: H. Gray Treadwell '09, 5th Avenue and 37th Street, New York, N. Y.

Honorary Representatives:

R. Wayne Parker '67, Prudential Building, Newark, N. J.
George K. Ward '69, 106 Northern Ave., New York City.
George B. Kinkead '70, Lexington, Kentucky.
Joseph H. Dulles '73, Princeton, N. J.
William Allen Butler '76, 54 Wall St., New York City.
Francis Speir '77, 52 Wall St., New York City.
William R. Wilder '79, 45 Cedar St., New York City.
Francis G. Landon '81, 131 E. 65th St., New York City.
Arthur H. Scribner '81, 597 Fifth Ave., New York City.
Charles W. Parker '82, 63 Macculloch Ave., Morristown, N. J.
Henry G. Bryant '83, 804 Flanders Bldg., Philadelphia, Pa.
Ambrose G. Todd '84, 165 Broadway, New York, N. Y.
Joseph Cashman '86, 44 Broad St., New York, N. Y.
Charles W. Halsey '98, 842 Broadway, New York City.
Clyde M. Carr, Railway Exchange Building, Chicago, Ill.

Class Representatives:

John W. Queen '87, 15 Exchange Place, Jersey City, N. J.
B. VanD. Hedges '88, 703 Watchung Ave., Plainfield, N. J.
Henry C. Irons '89, 101 Park Ave., New York City.

George L. Shearer '90, 45 Wall St., New York City.
James Barnes '91, Princeton, N. J.
V. Lansing Collins '92, Princeton, N. J.
Martin Saxe '93, 27 Pine St., New York, N. Y.
Gabriel S. Brown '94, Alpha Portland Cement Co., Easton, Pa.
Henry M. Canby '95, 600 Equitable Building, Wilmington, Del.
Charles Browne '96, Princeton, N. J.
John M. Frame '97, 526 Washington St., Reading, Pa.
Roswell F. Easton '98, 505 Fifth Ave., New York, N. Y.
J. H. Harrison '99, 810 Broad St., Newark, N. J.
Malcolm Buchanan '00, 26 West State St,, Trenton, N. J.
Everett R. Crawford, 61 Broadway, New York City.
William O. Morse '02, 17 Cedar St., New York City.
Charles E. Beury '03, 3701 No. Broad St., Philadelphia, Pa.
Weld M. Stevens '04, 79 Maple Ave., Greenwich, Conn.
Frank W. Spencer '05, 160 Front St., New York City.
S. G. Etherington '06, 50 E. 42nd St., New York City.
Charles T. Larzelere '07, 320 De Kalb St., Norristown, Pa.
Robert C. Clothier '08, Drexel Bldg., Philadelphia, Pa.
H. G. Treadwell '09, Tiffany & Company, New York City.
David Lawrence '10, 520 Evening Star Bldg., Washington, D. C.
Harold Rowe '11, 111 Broadway, New York, N. Y.
Frank D. Halsey '12, 19 W. 44th St., New York City.
Truman P. Handy '13, 543 E. 86th St., New York, N. Y.
John Colt '14, 162 Mercer St., Princeton, N. J.
Weir Stewart '15, 32 Franklin St., Auburn, N. Y.
Laurence G. Payson '16, 68 Linden Ave., Englewood, N. J.
William L. Dempsey '17, 61 Broadway, New York, N. Y.
J. Clement Boyd '18, Box 93, Upper Montclair, N. J.
Richard Cleveland '19, Princeton, N. J.
W. Irving Harris '20, 61 So. Burnett St., East Orange, N. J.
Asa S. Bushnell '21, 181 Little Hall, Princeton, N. J.

Association Representatives:

Arkansas—Edwin W. Williams '11, 1512 Gaines St., Little Rock, Ark.
Buffalo—George A. Mitchell '94, 1040 Delaware Ave., Buffalo, N. Y.
Cedar Rapids—A. C. Sinclair '98, "Thornlae," Cedar Rapids, Iowa.
Central New York—Weir Stewart '15, 32 Franklin St., Auburn, N. Y.
Chicago—Calvin Fentress '01, 208 So. La Salle St., Chicago, Ill.
S. H. Clinedinst '94, Menasha Co., Menasha, Wisc.
Cincinnati—O. DeG. Vanderbilt '06, Weir Frog Co., Cincinnati, Ohio.
Columbus—K. E. Burr '00, New First Nat'l. Bank Bldg., Columbus, O.
Delaware—Wm. C. Spruance '94, duPont Bldg., Wilmington, Del.
Erie—A. Blaine Robinson '00, North East, Pa.
Idaho—P. B. Carter '05, 204 McCarty Bldg., Boise, Idaho.
Indiana—N. B. Tarkington '93, 1100 N. Penn Ave., Indianapolis, Ind.
Jersey City—Joseph A. Dear '93, 32 Gifford Ave., Jersey City, N. J.
Kansas City—John F. Fennelly '20, 3600 Warwick Blvd., Kansas City, Mo.
Long Island—C. D. Robert '04, 77 Remsen St., Brooklyn, N. Y.
Los Angeles—D. S. Hammack '06, 419 American Bank Bldg., Los Angeles, Cal.

Louisville—W. H. Camp '07, 542 4th St., Louisville, Ky.
Maryland—J. C. McLanahan '01, Maryland Casualty Tower, Baltimore, Md.
Michigan—John G. Armstrong '03, The Armstrong Co., Detroit, Mich.
Montclair—H. N. Reeves '97, Montclair, N. J.
Newark—Harold H. Short '05, 1250 Woolworth Bldg., New York, N. Y.
Nebraska—F. W. Heagey '08, 808 Brandeis Theatre Bldg., Omaha, Neb.
New England—R. H. A. Carter '98, 34-35 India St., Boston, Mass.
Harold S. Edwards '06, 300 Summer St., Boston, Mass.
Herbert L. Dillon '07, 71 Broadway, New York, N. Y.
Howard M. Sawyer, '12, 145 Freeman St., Brookline, Mass.
Fred B. Read '10, 123 Blackstone Blvd., Providence, R. I.
New York—Joseph R. Truesdale '04, 149 Broadway, New York, N. Y.
Northeastern Penna—Paul Bedford '97, Miners Bank Bldg., Wilkes-Barre, Pa.
Northern Cal.—A. S. Lilley '92, 58 Sutter St., San Francisco, Cal.
Northern New Jersey—Clarence D. Kerr '01, 5 Nassau St., New York, N. Y.
Northern New York—Newton R. Cass '09, 17 No. Hawk St., Albany, N. Y.
Northern Ohio—John H. Drummond '10, 4500 Euclid Ave., Cleveland, Ohio.
Northwest—W. C. Motter '06, 726 Merchants Bank Bldg., St. Paul, Minn.
Oranges—Walter G. Sill '04, 200 Fifth Ave., New York, N. Y.
Oregon—Simeon R. Winch '11, Oregon Journal, Portland, Oregon.
Paterson—John D. Hinchliffe '13, 313 18th Ave., Paterson, N. J.
Philadelphia—Pierce Archer, Jr., '04, 1018 Stock Exch. Bldg., Philadelphia, Pa.
Pittsburgh—John G. Frazer '01, Union Arcade, Pittsburgh, Pa.
Plainfield—S. T. Carter, Jr., '86, 111 Broadway, New York, N. Y.
Quincy—Matthew F. Carrott '00, Quincy, Ill.
Rochester—Harry Otis Poole '93, 338 Powers Bldg., Rochester, N. Y.
Rocky Mountain—W. D. Quackenbush '99, 1317 No. Tejon St., Colorado Springs, Colorado.
St. Louis—Joseph L. Lewis '90, Federal Reserve Bldg., St. Louis, Mo.
Seattle—Raymond G. Wright '02, New York Bldg., Seattle, Wash.
Southern New York—Frederick P. King '00, 160 Broadway, New York, N. Y.
Toledo—William G. Dice '93, 240 Michigan St., Toledo, Ohio.
Trenton—Bruce Bedford '99, Luzerne Rubber Co., Trenton, N. J.
Washington, D. C.—Edmund Brady '01, Union Trust Bldg., Washington, D. C.

Representatives at Large:

William T. Vlymen '81, 379 Front St., Hempstead, N. Y.
G. F. McKinney '91, 52 William St., New York City.
Lawrence C. Woods '91, Frick Building, Pittsburgh, Pa.

George C. Fraser '93, 20 Exchange Place, New York City.
James McC. Mitchell '94, Marine Trust Building, Buffalo, N. Y.
George H. Williams '94, Pierce Building, St. Louis, Mo.
Charles L. Hamilton '95, 815 Liberty Ave., Pittsburgh, Pa.
Andrew C. Imbrie '95, 320 Broadway, New York City.
Albert G. Milbank '96, 49 Wall St., New York, N. Y.
Walter L. Johnson '97, 71 Broadway, New York, N. Y.
H. J. Cochran '00, 501 Fifth Ave., New York City.
Charles H. Higgins '03, 19 W. 44th St., New York City.
R. C. McNamara '03, 623 So. Wabash Ave., Chicago, Ill.
S. Hinman Bird '06, 127 E. 64th St., New York City.
Robert H. Jones '06, 809 Citizens and Southern Trust Building, Atlanta, Ga.
Roy S. Durstine '08, 25 W. 45th St., New York City.
Warren P. Hosmer '08, 51 Strathmore Rd., Brookline, Mass.
Rudolph Rauch '18, Villa Nova, Pa.
A. C. M. Azoy, Jr., '14, 88 No. Walnut St., East Orange, N. J.

ALUMNI ASSOCIATIONS

WESTERN ASSOCIATION OF PRINCETON CLUBS

Secretary, Robert D. Christie, Esq., 1908, 1002 Ridge Ave., Pittsburgh, Pa.

PRINCETON ENGINEERING ASSOCIATION

Secretary, George C. Wintringer, Esq., 1894, Princeton, N. J.

ARKANSAS

PRINCETON ALUMNI ASSOCIATION OF ARKANSAS

Secretary, A. H. Scott, Esq., 1908, 1017 Southern Trust Bldg., Little Rock, Ark.

CALIFORNIA

PRINCETON CLUB OF SOUTHERN CALIFORNIA

Secretary, D. S. Hammack, Esq., 1906, 419 American Bank Bldg., San Francisco, Cal.

PRINCETON ALUMNI ASSOCIATION OF NORTHERN CALIFORNIA AND NEVADA

Secretary, R. F. Coyle, Esq., 1907, 540 Sutter St., San Francisco, California.

COLORADO

ROCKY MOUNTAIN PRINCETON CLUB

Secretary, L. R. Kendrick, Esq., 1910, 801 Sixteenth St., Denver, Colo.

DELAWARE

PRINCETON ALUMNI ASSOCIATION OF DELAWARE

Secretary, Henry M. Canby, Esq., 1895, Equitable Building, Wilmington, Del.

DISTRICT OF COLUMBIA

PRINCETON ALUMNI ASSOCIATION OF THE DISTRICT OF COLUMBIA

Secretary, Milton W. King, Esq., 1912, 1755 Lanier Place, Washington, D. C.

GEORGIA

PRINCETON ALUMNI ASSOCIATION OF ATLANTA

Secretary, Carl Fox, Esq., 1904, 75 No. Moreland Ave., Atlanta, Ga.

IDAHO

PRINCETON ALUMNI ASSOCIATION OF IDAHO

Secretary, P. B. Carter, Esq., 1905, 204 McCarty Bldg., Boise, Idaho.

ILLINOIS

PRINCETON CLUB OF CHICAGO

Secretary, Rawleigh Warner, Esq., 1913, 1615 Harris Trust Bldg., Chicago, Ill.

PRINCETON CLUB OF QUINCY

Secretary, M. F. Carrott, Esq., 1900, 16-17 Stern Bldg., Quincy, Ill.

INDIANA

PRINCETON ALUMNI ASSOCIATION OF INDIANA

Secretary, Louis H. Bieler, Esq., 1918, American Foundry Co., Indianapolis, Ind.

IOWA

PRINCETON CLUB OF CEDAR RAPIDS

Secretary, Arthur Poe, Esq., 1900, care of Quaker Oats Co., Cedar Rapids, Iowa.

KENTUCKY

PRINCETON ALUMNI ASSOCIATION OF LOUISVILLE

Secretary, Ernest L. Vogt, Esq., 1918, 1402 No. Main St., Louisville, Ky.

MARYLAND

PRINCETON ALUMNI ASSOCIATION OF MARYLAND

Secretary, Eben J. D. Cross, Jr., Esq., 1914, 114 E. Eager St., Baltimore, Md.

MASSACHUSETTS

PRINCETON ALUMNI ASSOCIATION OF NEW ENGLAND

Secretary, R. H. A. Carter, Esq., 1899, 34-35 India St., Boston, Massachusetts.

MICHIGAN

PRINCETON CLUB OF MICHIGAN

Secretary, Charles B. Crouse, Esq., 1916, Detroit Trust Co., Detroit, Mich.

MINNESOTA

PRINCETON ALUMNI ASSOCIATION OF THE NORTHWEST

Secretary, Charles Bayly, Jr., Esq., 1918, Hotel Leamington, Minneapolis, Minn.

MISSOURI

PRINCETON CLUB OF KANSAS CITY

Secretary, Robert R. Lester, Esq., 1916, 3400 Campbell St., Kansas City, Missouri.

PRINCETON CLUB OF ST. LOUIS

Secretary, Samuel D. Conant, Esq., 1918, 1301 No. Sixth St., St. Louis, Mo.

NEBRASKA

PRINCETON ALUMNI ASSOCIATION OF NEBRASKA

Secretary, Herbert M. Rogers, Esq., 1893, 1515 Harney St., Omaha, Neb.

NEW JERSEY

PRINCETON ALUMNI ASSOCIATION OF NORTHERN NEW JERSEY

Secretary, Laurence G. Payson, Esq., 1916, 68 Linden Ave., Englewood, N. J.

PRINCETON ALUMNI ASSOCIATION OF HUDSON COUNTY, N. J.

Secretary, Otto F. Seggel, Esq., 1903, 358 Central Ave., Jersey City, N. J.

PRINCETON ALUMNI ASSOCIATION OF MONTCLAIR AND VICINITY

Secretary, A. B. Cutting, Esq., 1918, 77 Highland Ave., Montclair, N. J.

PRINCETON CLUB OF NEWARK

Secretary, J. Allen Machin, Esq., 1918, 274 Parker St., Newark, N. J.

PRINCETON ALUMNI FEDERATION OF NEW JERSEY

Secretary, Howard Carter, Esq., 1901, 100 Broadway, New York, N. Y.

PRINCETON ALUMNI ASSOCIATION OF THE ORANGES

Secretary, Roger Hinds, Esq., 1907, 52 Vanderbilt Ave., New York, N. Y.

PRINCETON ALUMNI ASSOCIATION OF PASSAIC COUNTY

Secretary, Robert Boyle, Esq., 1915, 132 Totawa Rd., Paterson, New Jersey.

PRINCETON CLUB OF PLAINFIELD

Secretary, Joseph Van Deventer, Esq., 1911, 632 Woodland Ave., Plainfield, N. J.

PRINCETON CLUB OF TRENTON

Secretary, C. P. Hutchinson, Esq., 1909, 817 Broad Street Bank Bldg., Trenton, N. J.

NEW YORK

PRINCETON ALUMNI ASSOCIATION OF NORTHERN NEW YORK

Secretary, F. S. Ackley, Esq., 1907, Consaul Rd., Route 49, Schenectady, N. Y.

PRINCETON ALUMNI ASSOCIATION OF LONG ISLAND

Secretary, C. D. Robert, Esq., 1904, 77 Remsen St., Brooklyn, New York.

PRINCETON CLUB OF BUFFALO
Secretary, Walter H. Johnson, Esq., 1917, Marine Trust Bldg., Buffalo, N. Y.

PRINCETON CLUB OF NEW YORK
Secretary, S. G. Etherington, Esq., 1906, 50 E. 42nd St., New York, N. Y.

PRINCETON ALUMNI ASSOCIATION OF ROCHESTER AND VICINITY
Secretary, R. M. Harris, Esq., 1915, 8 Argyle St., Rochester, New York.

PRINCETON ALUMNI ASSOCIATION OF SOUTHERN NEW YORK
Secretary, George A. Walker, Esq., 1907, 4 Kensington Terrace, White Plains, N. Y.

PRINCETON ALUMNI ASSOCIATION OF CENTRAL NEW YORK
Secretary, Stuart F. Raleigh, Esq., 1911, 112 DeWitt St., Syracuse, N. Y.

OHIO

PRINCETON ALUMNI ASSOCIATION OF CINCINNATI
Secretary, Loren G. Gatch, Esq., 1913, Union Central Bldg., Cincinnati, Ohio.

PRINCETON ALUMNI ASSOCIATION OF NORTHERN OHIO
Secretary, Richard Ziesing, Esq., 1917, 10610 Magnolia Drive, Cleveland, Ohio.

PRINCETON ALUMNI ASSOCIATION OF COLUMBUS AND VICINITY
Secretary, Theodore Huntington, Esq., 1895, Huntington National Bank, Columbus, Ohio.

PRINCETON ALUMNI ASSOCIATION OF TOLEDO
Secretary, Scott Hayes, Esq., 1919, 2242 Robinson Ave., Toledo, Ohio.

OREGON

PRINCETON ALUMNI ASSOCIATION OF OREGON
Secretary, P. L. Jackson, Esq., 1915, 610 Salmon St., Portland, Ore.

PENNSYLVANIA

PRINCETON ALUMNI ASSOCIATION OF ERIE
Secretary, Spencer A. Sisson, Esq., 1912, 409 Marine Bank Bldg., Erie, Pa.

PRINCETON ALUMNI ASSOCIATION OF CENTRAL PENNSYLVANIA
Secretary, Jackson H. Boyd, Esq., 1914, 402 Telegraph Bldg., Harrisburg, Pa.

PRINCETON CLUB OF PHILADELPHIA
Secretary, S. E. Slaymaker, Esq., 1914, 1223 Locust St., Philadelphia, Pa.

PRINCETON ALUMNI ASSOCIATION OF WESTERN PENNSYLVANIA
Secretary, J. B. Blackburn, Esq., 1914, 714 Oliver Bldg., Pittsburgh, Pa.

PRINCETON ALUMNI ASSOCIATION OF NORTHWESTERN PENNSYLVANIA
Secretary, Bruce Payne, Esq., 1911, Miners Bank Bldg., Wilkes-Barre, Pa.

TENNESSEE

PRINCETON ALUMNI ASSOCIATION OF TENNESSEE
Secretary, Walter H. Watkins, Esq., 1900, Hamilton National Bank Bldg., Chattanooga, Tenn.

TEXAS

THE BORDER ASSOCIATION
Secretary, C. M. Nebeker, Esq., 1913, State National Bank, El Paso, Texas.

PRINCETON ALUMNI ASSOCIATION OF TEXAS
Secretary,

UTAH

PRINCETON ALUMNI ASSOCIATION OF SALT LAKE CITY
Secretary, George A. Critchlow, Esq., 1911, McCormick Bldg., Salt Lake City, Utah.

WASHINGTON

PRINCETON CLUB OF SEATTLE
Secretary, Charles Donahoe, Esq., 1917, 754 Empire Bldg., Seattle, Wash.

NOMINATION AND ELECTION OF ALUMNI TRUSTEES

The Board of Trustees of Princeton University having conferred upon the Alumni the privilege of nominating and electing eight Alumni Trustees and having referred it to the Graduate Council to formulate a plan regulating the term of service, mode of nomination and election and rules and regulations pertaining thereto, the following are adopted:

1. NUMBER: There shall be eight Alumni Trustees, each to serve for a term of four years.

2. ELIGIBILITY: No one shall be eligible for election as an Alumni Trustee except a graduate of Princeton University whose class has been graduated at least ten years. No Alumni Trustee shall be eligible for re-election to succeed himself.

3. ELECTORS: Any one who has been a matriculated student of the University and whose name is carried on his class roll filed in the Office of the Secretary of the Graduate Council, or one who has received a degree from the University, shall be eligible to vote for Alumni Trustees.

4. REGIONS: The United States shall be divided into eight regions as follows:

Region No. 1—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York.
Region No. 2—New Jersey, Delaware, Maryland, and District of Columbia.
Region No. 3—Pennsylvania.
Region No. 4—Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, and Tennessee.
Region No. 5—Michigan, Ohio, Indiana, and Kentucky.
Region No. 6—Illinois, Iowa, Wisconsin, and Minnesota.
Region No. 7—Missouri, Arkansas, Oklahoma, South Dakota, Montana, Wyoming, and Colorado.
Region No. 8—Washington, Oregon, California, Idaho, Arizona, Nevada, New Mexico and Utah.

A Trustee shall be elected from each of these regions every four years, one from each of two regions each year.

5. CONDUCT OF ELECTIONS: The Graduate Council of Princeton University shall have charge of the nomination and election of Alumni Trustees and shall defray the expenses thereof.

6. NOMINATIONS: There shall be a Committee to nominate candidates for Alumni Trustees to consist of nine members, three of whom shall be members of the Council. It shall be divided into three groups of three each, one of each group to be a member of the Council; one group to be elected by the Council each year; each group

to serve three years; no member to be eligible for re-election until one year after the expiration of his term of office.

Prior to the Fall meeting of the Council, the Executive Committee shall select three Alumni, and shall report their names to the Fall meeting of the Council as candidates for this Committee. The Council upon receiving the report shall proceed to elect three members of this Committee voting on the names reported by the Executive Committee and any other names that may be presented at the meeting of the Council. The three candidates receiving the highest number of votes cast shall be elected members of this Committee. The Executive Committee of the Graduate Council shall fill any vacancy that may occur on this Committee between elections; shall designate its chairman; no chairman shall serve continuously over one year. The Committee as thus constituted shall nominate not less than two candidates for each vacancy about to occur in the group of Alumni Trustees.

To initiate the foregoing plan, the Council shall elect a Committee of nine dividing into the three groups indicating the term of each group.

This Committee shall report their nominees to the Secretary of the Council not later than March 1st, and such nominations shall be published in the next number of the *Alumni Weekly*.

Any elector may file with the Secretary of the Council a written nomination of an additional candidate. Only those additional candidates who shall have been nominated as above by at least twenty electors shall be eligible for election.

7. Voting: On or before May 1 of each year the Graduate Council, or its representative, shall send to each elector an official ballot with a return envelope marked "confidential," and addressed to the Office of the Graduate Council.

An elector who has lost or failed to receive the original ballot shall be entitled to receive a duplicate upon application to the Office of the Graduate Council.

Electors shall cast their votes in person at the Office of the Graduate Council, or by mail, and all ballots received in the Office of the Graduate Council shall be held unopened until after the closing of the polls on the day of the election, when they shall be delivered to the tellers.

8. Tellers: The Secretary of the Graduate Council, a member of the Faculty, and a member of the Board of Trustees to be appointed by their respective bodies, shall act as tellers.

They shall act by a majority, and in case of the absence or disability of any teller, the President of the University shall appoint a substitute.

Before entering upon their duties they shall take oath that they will conduct the election fairly and will not reveal how any vote was cast.

9. Elections: The annual election shall be held in the office of the Graduate Council in Princeton on Commencement Day, and the polls shall close at 1 p. m.

Within twenty-four hours after the closing of the polls the tellers shall open the ballots received from the Office of the Graduate Council, complete the count of the vote, and certify in writing to the

Board of Trustees the name of the candidate or candidates receiving the highest number of votes and also the number of votes received by each candidate. They shall make public the name of the Trustee or Trustees so elected, but shall not divulge the number of votes cast for the various candidates. In case of a tie vote, the election shall be decided by the drawing of lots.

10. VACANCIES: Any vacancy occurring among the Alumni Trustees by death, resignation or otherwise, shall be filled for the unexpired term at the next election in the manner prescribed in the foregoing sections.

PART XII

LISTS OF STUDENTS, DIRECTORY, INDEX

LISTS OF STUDENTS

STUDENTS IN THE GRADUATE SCHOOL

Fellows

Agar, Herbert Sebastian, Princeton, N. J., 214 The Western Way
A.B. Columbia University, 1919.
A.M. Princeton University, 1920.
Charles Scribner Fellow in English

Amberson, William Ruthrauff, Waynesboro, Pa., 15-E, G. C.
Ph.B. Lafayette College, 1915.
Class of 1877 Fellow in Biology

Anderson, William Theodore, Jr., Trenton, N. J., 76 G. C.
B.S. Princeton University, 1921.
DuPont Fellow in Chemistry

Beebe, Ralph Alonzo, Monson, Mass., 104 G. C.
A.B. Amherst College, 1920.
Harvard Fellow in Chemistry

Buell, Raymond Leslie, Long Beach, Cal., 23 G. C.
A.B. Occidental College, 1918.
A.M. Princeton University, 1920.
Charlotte Elizabeth Procter Fellow in Politics

Burke, Armand, Los Angeles, Cal., 1-A, G. C.
Ph.B. University of Chicago, 1918.
Charlotte Elizabeth Procter Fellow in Philosophy

Cairnes, Clive Elmore, Boundary Bay, B. C., Canada, 63 G. C.
A.B. University of British Columbia, 1916.
B.S. University of Washington, 1917.
A.M. Princeton University, 1920.
Charlotte Elizabeth Procter Fellow in Geology

Charlesworth, Martin Percival, Cambridge, England, 14-B, G. C.
B.A. Jesus College, University of Cambridge, England, 1920.
Charlotte Elizabeth Procter Fellow in Classics

Doescher, Waldemar Oswald, New Washington, Ohio, 22 G. C.
A.B. Capital University. 1918.
A.M. Princeton University, 1921.
Gordon Macdonald Fellow in Philosophy

Duffendack, Ora Stanley, Tulsa, Okla., 29 Edwards Place
B.S. University of Chicago, 1917.
A.M. Princeton University, 1921.
Class of 1860 Fellow in Experimental Science

Eddy, William Alfred, Princeton, N. J., Pelham Ave.
Litt.B. Princeton University, 1917.
A.M. Princeton University, 1921.
Fellow in English

Fisher, Willis Raper, London, Ohio, 120 Nassau St.
A.B. Ohio Wesleyan University, 1916.
Fellow in English

Gauger, Alfred William, St. Paul, Minn., 73 G. C.
A.B. University of Minnesota, 1914.
A.M. Princeton University, 1920.
Charlotte Elizabeth Procter Fellow in Chemistry

Grisemer, Walter, Kokomo, Indiana, 15-C, G. C.
A.B. University of Illinois, 1918.
A.M. University of Illinois, 1921.
Fellow in Mathematics

Helmick, Paul Streeper, Princeton, N. J., 46 Vandeventer Ave.
A.B. State University of Iowa, 1915.
M.S. State University of Iowa, 1916.
Ph.D. State University of Iowa, 1920.
National Research Fellow in Physics.

Holsen, James Noble, Sumner, Illinois, 15-A, G. C.
A.B. Butler College, 1917.
A.M. Indiana University, 1919.
South East Club Fellow in Social Science

Hotelling, Harold, Seattle, Wash., 28 Linden Lane
A.B. University of Washington, 1919.
M.S. University of Washington, 1921.
J. S. K. Fellow in Mathematics

Humphreys, Harold Llewellyn, Van Wert, Ohio, 32 G. C.
A.B. University of Michigan, 1916.
Boudinot Fellow in Modern Languages

Ingholt, Harald, Copenhagen, Denmark, 7-A, G. C.
Graduate, University of Copenhagen, Denmark, 1915.
American Scandinavian Fellow in Art and Archaeology

James, William Fleming, St. John, N. B. Canada, 91 G. C.
A.B. St. Francis Xavier University, 1918.
M.S. McGill University, 1921.
Fellow in Geology

Kretschmann, Philip Miller, Seattle, Wash., 128 G. C.
A.B. Princeton University, 1919.
A.M. Princeton University, 1921.
Fellow in Philosophy

Levengood, Sidney Lawrence, Wayne, Pa. 7-B, G. C.
Litt.B. Princeton University, 1915.
Charlotte Elizabeth Procter Fellow in Modern Languages

Leyburn, James Graham, Rome, Ga., 92 G. C.
A.B. Trinity College (N. C.), 1920.
A.M. Trinity College (N. C.), 1921
Fellow in Economics and Social Institutions

MacKay, Robert Alexander, Woodville, Ontario, Canada, 2-A, G. C.
A.B. University of Toronto, 1920.
Class of 1883 Fellow in History and Politics

Mason, Alpheus Thomas, Snow Hill, Md., 1-B, G. C.
A.B. Dickinson College, 1920.
A.M. Princeton University, 1921.
Boudinot Fellow in History and Politics

O'Brien-Moore, Ainsworth, Los Angeles, Cal., 5-B, G. C.
A.B. Princeton University, 1916.
A.M. Princeton University, 1918.
Fellow in Classics

Olmstead, Paul Smith, Robbinsville, N. J., 15-B, G. C.
B.S. Princeton University, 1919.
James W. Queen Fellow in Physics

Pease, Robert Norton, Burlington, Vt., 61 G. C.
B.S. University of Vermont, 1916.
Ph.D. Princeton University, 1921.
National Research Fellow in Chemistry

Powell, Garfield, Poutycymmer, Wales, 154 G. C.
B.S. University of Wales, 1914.
B.A. Christ's College, Cambridge, 1921.
M.S. University of Wales, 1921.
Charlotte Elizabeth Procter Fellow in Chemistry

Rogers, Robert Samuel, Madison, N. J., 81 G. C.
A.B. University of Pennsylvania, 1920.
A.M. Princeton University, 1921.
John Harding Page Fellow in Classics

Rogers, William, Jr., Ashbourne, Pa., 54 G. C.
B.S. Princeton University, 1921.
Sayre Fellow in Applied Chemistry

Shannon, Joseph Robert, LaPorte, Texas, 2-A, G. C.
B.S. Rice Institute, 1920.
Fellow in Economics and Social Institutions

Shenstone, Allan Goodrich, Toronto, Canada, 14-C, G. C.
B.S. Princeton University, 1914.
A.M. Princeton University, 1920.
Charlotte Elizabeth Procter Fellow in Physics

Sitterly, Bancroft Walker, Madison, N. J., 15-B, G. C.
A.B. Princeton University, 1917.
A.M. Princeton University, 1920.
Thaw Fellow in Astronomy

Smith, Daniel DuPré, Madison, Wis., 4-A, G. C.
A.B. University of Wisconsin, 1914.
A.M. University of Wisconsin, 1915.
Fellow in Classics

Southworth, Shirley Donald, Pittsburgh, Pa., 146 G. C.
A.B. Princeton University, 1918.
A.M. Princeton University, 1921.
Porter Ogden Jacobus Fellow in Economics and Social Institutions

Stevens, Kenneth Porter, Danbury, Conn., 7-C, G. C.
A.B. Wesleyan University, 1918.
A.M. Wesleyan University, 1920.
Francis Hinton Maule Fellow in Biology

Thomas, Tracy Yerkes, Little Rock, Ark., 7-C, G. C.
A.B. Rice Institute, 1921.
J. S. K. Fellow in Mathematics

Turner, Louis Alexander, Akron, Ohio, 31 G. C.
A.B. Cornell University, 1920.
A.M. Cornell University, 1920.
Class of 1883 Fellow in Physics

Velte, Friedrich Mowbray, Saharanpur, U. P., India, 78 G. C.
A.B. Princeton University, 1915.
A.M. Princeton University, 1920.
Fellow in English

Wade, Ira Owen, Marietta, Ohio, 103 G. C.
A.B. Johns Hopkins University, 1916.
A.M. Columbia University, 1919.
Fellow in Modern Languages

Walley, Harold Reinoehl, Reading, Pa., 71 G. C.
A.B. Princeton University, 1921.
Class of 1873 Fellow in English

Wheelwright, Philip Ellis, Elizabeth, N. J., 74 G. C.
A.B. Princeton University, 1921.
Chancellor Green Fellow in Mental Science

Wright, Sydney Longstreth, Jr., Logan, Philadelphia, Pa., 144 G. C.
B.S. Princeton University, 1918.
A.M. Princeton University, 1920.
Charlotte Elizabeth Procter Fellow in Chemistry

Young, James Donald, New York, N. Y., 14-D, G. C.
A.B. Columbia University, 1919.
A.M. Princeton University, 1920.
Charlotte Elizabeth Procter Fellow in Art and Archaeology

GRADUATE SCHOLARS

Davis, Philip Haldane, Princeton, N. J., 21 G. C.
A.B. Princeton University, 1921.
Graduate Scholar in Classics and Archaeology

Graham, John Alexander, Lexington, Va., 112 G. C.
A.B. Washington and Lee University, 1914.
Theodore Cuyler Graduate Scholar in Modern Languages

Herben, Stephen Joseph, Jr.; Princeton, N. J., Pelham Ave.
Litt.B. Rutgers College, 1920.
A.M. Princeton University, 1921.
Graduate Scholar in English

Lee, Rensselaer Wright, Philadelphia, Pa., 8-A, G. C.
A.B. Princeton University, 1920.
Graduate Scholar in English

McLaughlin, Robert, Worcester, Mass., 10-B, G. C.
A.B. Princeton University, 1921.
Graduate Scholar in Art and Archaeology

Tippetts, Charles Sanford, Princeton, N. J., 206 Nassau St.
Litt.B. Princeton University, 1916.
Graduate Scholar in Economics and Social Institutions

Wanless, Harold Rollin, Chicago, Ill., 104 G. C.
B.S. Princeton University, 1920.
A.M. Princeton University, 1921.
Warfield Graduate Scholar in Geology

GRADUATE STUDENTS

Agar, William Macdonough, New York, N. Y., 214 The Western Way
B.S. Princeton University, 1916.
A.M. Princeton University, 1920.

Alexander, Clark Conrade, Martin, Tenn., Dutch Neck, N. J.
A.B. Trinity College, 1919.

Alling, Eric Lattimore, Rochester, N. Y., 10 Boudinot St.
B.S. Princeton University, 1914.
M.D. Columbia University, 1919.

Baird, William Martyn, Jr., Pyeng Yang, Korea, 417 H. S.
A.B. College of Wooster, 1919.

Baker, Henry Drewry, Norfolk, Va., 84 G. C.
A.B. Princeton University, 1920.

***Bassett, Melvin Eugene, Detroit, Mich., 24 Dickinson St.
A.B. University of Michigan, 1903.

Beaumont, André Alden, Jr., Wilkes-Barre, Pa., 12 G. C.
A.B. Yale University, 1921.

*Beekley, John Sherman, West Chester, Ohio, 24 Dickinson St.
A.B. Miami University, 1915.
A.M. University of Illinois, 1917.

*Beisler, Walter Herman, Hilton, N. J., 23 Bank St.
B.S. Rutgers College, 1918.
M.S. Rutgers College, 1919.
M.S. Princeton University, 1921.

Bender, Harold Stauffer, Elkhart, Ind., 53 B. S.
A.B. Goshen College, 1918.

**Bennett, William Whipple, Crete, Neb., 22 G. C.
A.B. Doane College, 1919.
A.M. Princeton University, 1921.

Blair, Herbert Edgar, Taiku, Korea, 29 Alexander St.
A.B. Park College, 1901.
A.M. Princeton University, 1904.

***Bretz, Harry, Chicago, Ill., 11 G. C.
A.B. William Jewell College, 1904.
A.B. University of Chicago, 1910.
A.M. University of Chicago, 1917.

Bryan, Wilhelmus Bogart, Jr., Washington, D. C., 409 H. S.
A.B. Princeton University, 1920.

Butler, David Campbell, Galveston, Texas, 43 A. S.
A.B. Austin College, 1918.

Campbell, Kenneth, Seattle, Wash., 418 H. S.
A.B. University of Washington, 1920.

Carruthers, Donald Wallace, Harrisburg, Pa., 210 H. S.
A.B. Princeton University, 1915.

Cassady, Maynard Lamar, Huntingdon, Pa., 109 H. S.
A.B. Juniata College, 1919.

Chamberlain, William Douglas, Glasgow, Ky., 87 A. S.
A.B. Centre College, 1919.

Chuang, Chai-Hsuan, Soochow, China, 14 Hamilton Ave.
B.S. Miami University, 1919.
A.M. Columbia University, 1920.

Chung, James, So. Pyung An, Korea, 406 H. S.
Union Christian College (Korea), 1911.
B.D. San Francisco Seminary, 1921.

**Clark, Frank Marshall, Peekskill, N. Y., 21 Bank St.
B.S. Wesleyan University, 1917.
M.S. Wesleyan University, 1918.

Close, Harold Wilberforce, Beirut, Syria, 25 Murray Place
A.B. Princeton University, 1910.
A.M. Princeton University, 1915.

Comstock, Francis Adams, South Orange, N. J., 82 G. C.
A.B. Princeton University, 1920.

Cook, Arthur Norton, Trenton, N. J., 1135 Greenwood Ave., Tren-
B.S. Colgate University, 1919. [ton, N. J.
A.M. University of Pennsylvania, 1921.

Cumming, William Patterson, Hampton, Va., 103 G. C.
A.B. Davidson College, 1921.

Cuncannon, Paul Miller, Kennett Square, Pa., 148 G. C.
A.B. Swarthmore College, 1915.
A.M. Princeton University, 1920.

Davis, Arthur Paul, Springfield, Mass., Pyne Tower, G. C.
A.B. Princeton University, 1921.

Dennis, Holmes VanMater, III, Princeton, N. J., 87 Library Place
A.B. Princeton University, 1918.
A.M. Princeton University, 1920.

Dew, Walter Arthur, Princeton, N. J., 15 D, G. C.
B.S. Princeton University, 1921.

Djang, Fang, Nanking, China, 15 B. S.
A.B. University of Nanking, 1918.

**Durling, Dwight Leonard, Westerville, Ohio, 41 University Place
A.B. Ohio Wesleyan University, 1921.

Edgar, Marshall Lowndes, Princeton, N. J., 24 Dickinson St.
A.B. Princeton University, 1917.
A.M. Princeton University, 1921.

Elsasser, Albert Rudolph, Princeton, N. J., 112 Mercer St.
A.B. University of Pennsylvania, 1917.

English, Thomas Hopkins, Gillespie, Ill., 78 G. C.
Litt.B. Princeton University, 1918.

Fetter, Frank Whitson, Princeton, N. J., 92 G. C.
A.B. Swarthmore College, 1920.

Fitch, Hugh Richardson, Princeton, N. J., 6-A, G. C.
Ph.B. College of Wooster, 1917.

Foreman, Kenneth Joseph, Montreat, N. C., 95 Mercer St.
A.B. Davidson College, 1911.
A.M. Princeton University, 1921.
Th.B. Princeton Theological Seminary, 1921.
Alumni Fellow Princeton Theological Seminary

Fox, George Gillespie, Philadelphia, Pa., 101 G. C.
A.B. Princeton University, 1920.

***Frois-Wittman, Jean, Paris, France, 124 G. C.
Lycée Henri IV, Paris.
Ecole des Beaux-Arts, Paris.
A.M. Princeton University, 1921.

Goeree, Peter Charles James, Groningen, Netherlands, 35 B. S.
A.B. Calvin College, 1920.

Gordon, Livingstone Albert, Newark, N. J., 34 A. S.
A.B. University of Nebraska, 1917.

*Gortatowsky, Claude, Albany, Ga., 11-C, G.C.
B.S. Princeton University, 1921.

Graf, Charles Earl, Elmer, N. J., 17 Olden St.
A.B. Washington and Jefferson College, 1919.

Hamilton, Charles Robert, Laguna, P. I., 29 Alexander St.
A.B. Hanover College, 1893.
A.M. Hanover College, 1896.
D.D. Hanover College, 1913.

Harth, Henry Charles Philip, Trenton, N. J., 142 G. C.
A.B. Princeton University, 1921.

Hassler, Charles Victor, Allentown, Pa., Benham Club
A.B. Albright College, 1918.

**Helm, McKinley, Forest Grove, Oregon, 156 G. C.
A.B. University of Idaho, 1917.

Hinds, Asher Estey, Washington, D. C., 41 G. C.
A.B. Harvard University, 1917.

Hoffman, Harmon Leslie, Cottage Grove, Tenn., 20 A. S.
A.B. Trinity College, 1919.

Hood, Harvey Allen, Minneapolis, Minn., 5 Greenview Ave.
A.B. Buena Vista College, 1920.

Hope, George Alexander, Jefferson City, Mo., 8-B, G. C.
A.B. University of Missouri, 1920.

*Howard, Henry Cobourn, Jr., Seattle, Wash., 24 G. C.
B.S. University of Washington, 1915.

Jackson, Sumner Allen, Passaic, N. J., 21 G. C.
A.B. Princeton University, 1920.

Jones, Howard Algernon, Conshohocken, Pa., 24 G. C.
B.S. Pennsylvania State College, 1918.
A.M. Princeton University, 1921.

Keyes, Ambrose James, Brooklyn, N. Y., 7-A, G. C.
A.B. Georgetown University, 1921.

Kurth, Edward Houghton, Schenectady, N. Y., 15-A, G. C.
C.E. Princeton University, 1920.
M.S. Princeton University, 1921.

Leber, Charles Tudor, Baltimore, Md., 117 H. S.
A.B. Johns Hopkins University, 1920.

Little, Henry, Jr., Springfield, Mo., 44 A. S.
A.B. Amherst College, 1920.

Liu, Chi Fung, Shantung, China, 36 B. S.
Ph.B. University of Chicago, 1921.

Livesay, Joe Bunger, Waynesboro, Va., 218 H. S.
A.B. Washington and Lee University, 1919.

Loehlin, Clinton Herbert, Minneapolis, Minn., 217 H. S.
A.B. University of Minnesota, 1920.

Lyon, Quinter Marcellus, Washington, D. C., 39 B. S.
A.B. George Washington University, 1920.

McConaughy, Nathaniel Upham, New Dorp, N. Y., 30 A. S.
A.B. Bowdoin College, 1917.

McCormick, Gordon, Chicago, Ill., Pyne Tower, G. C.
Litt.B. Princeton University, 1917.

McCune, George, Grove City, Pa., 21 G. C.
A.B. Princeton University, 1920.

*McDavid, Adolphus Jones, Columbia, S. C., 52 G. C.
B.S. University of South Carolina, 1921.

MacInnis, David Sutherland, Syracuse, N. Y., 109 H. S.
A.B. Syracuse University, 1920.

Mackay, Charles Alexander, Truro, N. S. Canada, 44 G. C.
A.B. Dalhousie University, 1913.
A.M. Dalhousie University, 1921.
1851 Exhibition Scholar, London, England

Martin, Jesse Penney, Denver, Colo., 5 B. S.
B.S. Washington and Jefferson College, 1896.
M.S. Washington and Jefferson College, 1899.
D.D. Denver University, 1915.

Matthews, Harrison Freeman, Baltimore, Md., 62 G. C.
A.B. Princeton University, 1921.

Mawdsley, James Buckland, Cereal, Alberta, Canada, 91 G. C.
B.S. McGill University, 1921.

*Mehl, Robert Franklin, Lancaster, Pa., 2-B, G. C.
B.S. Franklin and Marshall College, 1919.

*Menzel, Donald Howard, Denver, Colo., 15-C, G. C.
A.B. University of Denver, 1920.
A.M. University of Denver, 1921.

Mierow, Herbert Edward, Lakewood, N. J., 5-A, G. C.
A.B. Princeton University, 1914.
A.M. Colorado College, 1921.

Miller, Cedric Verdi, Philadelphia, Pa., 21 A. S.
A.B. Maryville College, 1919.

Miller, Edmund Frederick, St. Louis, Mo., 46 A. S.
A.B. Westminster College (Mo.), 1918.

Mimovitch, Ilija, Belgrade, Serbia, 88 S. E.
University of Belgrade, Serbia.

Moore, Leopold Paul, Jr., Philadelphia, Pa., 1 A. S.
A.B. Ursinus College, 1920.

Muto, Kaichi, Gifu, Japan, 24 Dickinson St.
Rizaigakushi Keio Gijuku University, Tokyo, 1920.

Myers, LeRoy, Elm Grove, W. Va., 20 B. S.
A.B. Washington and Jefferson College, 1920.

Ogden, Robert Francis, Ashland, Ky., 35 A. S.
A.B. Centre College, 1919.

Palmore, Peyton Lee, Richmond, Va., 28 A. S.
A.B. Hampden-Sidney College, 1917.

Park, Julian Supt, Seoul, Korea, 300 H. S.
A.B. Baldwin-Wallace College, 1918.

Parke, Robert Irvin, Montoursville, Pa., 6-B, G. C.
A.B. Trinity College (Conn.), 1921.
Mary E. Terry Fellow, Trinity College (Conn.)

Parker, Henry Griffith, Jr., New Brunswick, N. J., 42 G. C.
A.B. Rutgers College, 1921.

Perry, Edward Ritzema, Shrewsbury, N. J., 64 G. C.
A.B. Princeton University, 1921.

Plesscher, John Gerhard, Grundy Center, Iowa, 25 Bank St.
A.B. Mission House College (Wisconsin), 1917.

*Powers, Donald Howard, Allston, Mass., 4-B, G. C.
A.B. Boston University, 1921.

Purdy, Jason G., Maryville, Tenn., 415 H. S.
A.B. Maryville College, 1919.

Rankin, Robert Stanley, Tusculum, Tenn., 154 Mercer St.
A.B. Tusculum College, 1920.

Reed, Glenn Patterson, Houston, Pa., 25 A. S.
A.B. Westminster College (Pa.), 1920.

Rice, Charles Herbert, Wooster, Ohio, Psychological Laboratory
A.B. College of Wooster, 1906.
A.M. College of Wooster, 1920.

Riester, George Julius, St. Louis, Mo., 403 H. S.
A.B. Park College, 1921.

Ringler, Alexander Preston, Berlin, Pa., 136 Nassau St.
A.B. Pennsylvania State College, 1917.

**Rondthaler, Theodore, Winston-Salem, N. C., 160 Mercer St.
A.B. University of North Carolina, 1919.

***Sandidge, William Lee, Jr., Lynchburg, Va., 126 G. C.
B.S. University of Virginia, 1914.
M.S. University of Virginia, 1915.

Sawhill, John Alexander, Boulder, Colo., 5-C, G. C.
A.B. University of Colorado, 1917.
A.M. Princeton University, 1921.

*Scheck, Magnus George, Rochester, N. Y., 11-B, G. C.
A.B. University of Rochester, 1920.

Schlesinger, Alfred Cary, College Point, N. Y., 94 G. C.
A.B. Williams College, 1921.
Clark Graduate Scholar, Williams College

Seymour, Otto Cleveland, Doniphan, Mo., 38 A. S.
A.B. Henry Kendall College, 1920.

Slater, John Edwin, Neepawa, Manitoba, Canada, 6 A. S.
A.B. Wheaton College, 1917.
George S. Green Fellow, Princeton Theological Seminary

Sloan, Alexander Notman, Jr., Rahway, N. J., 5 Bryant St., Rah-
A.B. Princeton University, 1921. [way, N. J.

Smith, James Gerald, Denver, Colo., 3 S. R.
A.B. Princeton University, 1920.

Spratt, David John, Collingswood, N. J., 27 A. S.
A.B. Lafayette College, 1919.

Squier, Frederick Craig, Jr., Rahway, N. J., 11 Dickinson St.
B.S. Princeton University, 1921.

Statler, Foster Boyd, Windber, Pa., 32 A. S.
A.B. Juniata College, 1920.

Stillwell, Richard, Lakewood, N. J., 14-A, G. C.
A.B. Princeton University, 1921.

Stohlman, William Frederick, New York, N. Y., 34 G. C.
A.B. Princeton University, 1909.
A.M. Princeton University, 1917.

Stover, Edward Conklin, Jr., Trenton, N. J., 12 G. C.
Litt.B. Princeton University, 1915.

Swift, Emerson Howland, New York, N. Y., 81 G. C.
A.B. Williams College, 1912.
A.M. Princeton University, 1916.
Ph.D. Princeton University, 1921.

Thompson, Marshall Alexander, Maxton, N. C., 29 Bank Street
A.B. Princeton University, 1921.
Monmouth County Research Fellow in Economics

VanBeek, Johannes, Grand Rapids, Mich., 67 B. S.
A.B. Calvin College, 1920.
Th.M. Princeton Theological Seminary, 1921.

VanDyke, Martin, Paterson, N. J., 69 B. S.
A.B. Princeton University, 1916.
A.M. Princeton University, 1919.
Th.M. Princeton Theological Seminary, 1921.

***Vera, Orestes, Santiago, Chile, 10-A, G. C.
Br.Hu. University of Santiago, 1917.

Vigneras André Louis, Limoges, France, 110 Moore St.
A.B. Princeton University, 1921.

Voorhees, Edward Newton, Minneapolis, Minn., 11-A, G. C.
A.B. Hamline College, 1914.
A.M. Boston University, 1917.

Walter, James Roy, Apollo, Pa., 13 A. S.
A.B. Grove City College, 1918.

Waltersdorf, Maurice Cleveland, Hanover, Pa., 100 Stockton St.
A.B. Franklin and Marshall College, 1916.

*Webb, Thomas Jefferson, Anderson, S. C., 52 G. C.
B.S. Clemson College, 1921.

Wefer, William Francis, Brooklyn, N. Y., 115 H. S.
A.B. Lafayette College, 1917.

Weir, William Wilbur, Winchester, Kansas, 804 H. S.
A.B. Geneva College, 1916.

*Whalen, Herbert Franklin, Everett, Mass., 4-B, G. C.
A.B. Boston University, 1920.
A.M. Boston University, 1921.

Wilson, Robert Renbert, Sherman, Texas, 76 Alexander St.
A.B. Austin College, 1918.

Wilson, William Lester, East Flat Rock, N. C., 11 G. C.
A.B. Piedmont College, 1921.

Windt, Valentine Barthold, New York, N. Y., 8-B, G. C.
A.B. Cornell University, 1921.

Woods, Joseph Milliken, Jr., Lewistown, Pa., 23 A. S.
A.B. Princeton University, 1918.

Wyeth, John Allan, Jr., New York, N. Y., 24 Dickinson St.
A.B. Princeton University, 1915.
A.M. Princeton University, 1917.

Yamaguchi, Tamon, Tokyo, Japan, 72 G. C.
Torpedo and Gunnery College.
Japanese Naval Academy, 1912.

Yao, Yu Tai, Tientsin, China, 15-F, G. C.
B.S. University of Chicago, 1917.
A.M. Princeton University, 1921.

Yeaworth, Irvin Shortess, Govans, Md., 303 H. S.
A.B. Johns Hopkins University, 1920.

Young, John Parke, Los Angeles, Cal., 23 G. C.
A.B. Occidental College, 1917.
A.M. Columbia University, 1919.
A.M. Princeton University, 1920.

Fellows	45
Graduate Scholars	7
Students on Full-Time	62
Students on Part-Time	70
	184

* Assistant.
** Reader.
*** Part-Time Instructor.

STUDENTS IN THE SCHOOL OF ELECTRICAL ENGINEERING

Second Year

Horton, A. W., Jr., Germantown, Pa., 54 G. C.
Orson Desaix Munn Fellow in Electrical Engineering
Isarankura, Pravat, Bankok, Siam, 15 E, G. C.
Schwartz, Philip, Jersey City, N. J., G. C.

First Year

Elgin, Charles Porter, Columbus, Ohio, 50 Maple St.

UNDERGRADUATES

Senior Class, 1922

Candidates for the Degree of A.B.

*Alden, Oliver III,	Anna, Ill.,	47 Spring St.
Aldridge, Clayson Wheeler,	Rome, N. Y.,	304 H'm
*Alexander, Wallace Leonard,	Philadelphia, Pa.,	96 B
*Anderson, Malcolm Evelyn,	Princeton, N. J.,	93 H
Baker, Albert de Russy,	Providence, R. I.,	44 '79 H
Ballard, John Davidson,	Bellevue, Pa.,	81 H
Barnes, Albert Sydney,	Philadelphia, Pa.,	4 N R
Barr, Alfred Hamilton, Jr.,	Baltimore, Md.,	3 S D
*Bartlett, Willard, Jr.,	St. Louis, Mo.,	94 B
Barwise, Joseph Hudson, 3rd,	Ft. Worth, Texas,	22 P
Bathgate, James Edward, 3rd,	Basking Ridge, N. J.,	14 S W
Bennett, Elbert Lansing,	Philadelphia, Pa.,	3 E M W
Berckmans, Bruce,	New York, N. Y.,	98 Nassau St.
Berry, James Raymond,	Newark, N. J.,	12 W B
Beyerle, Arthur Frederick,	Brooklyn, N. Y.,	20 S W
Blake, Edmund Butler,	New York, N. Y.,	72 L
*Blow, Frederick Matthiessen,	La Salle, Ill.,	5 A H
Botting, Vincent,	New York, N. Y.,	431 C'y
Boyce, Joseph Canon,	Pittsburgh, Pa.,	11 N D
Bradshaw, Robert Barlet,	Haddonfield, N. J.,	3 E M W
†Brawner, Alexander Harrison,	New York, N. Y.,	65 C
*Breen, Stephen Anthony,	Lowell, Mass.,	461 C'y
†Breslauer, Milton Keller,	New York, N. Y.,	2 B
Brokaw, Paul Irvine,	Tacoma, Wash.,	66 Nassau St.
Brown, James Noble,	Cranbury, N. J.,	3 N R
Browning, Samuel Pearce, Jr.,	Maysville, Ky.,	2 S E B
Brussaly, Manuel,	Montclair, N. J.,	3 S R
*Buechner, Robert,	New York, N. Y.,	112 L
*Burke, Edward Thomas,	New York, N. Y.,	Cannon Club
Butler, Lee David,	Dunmore, Pa.,	57 Jefferson Rd.
*Caldwell, James Ralston,	Philadelphia, Pa.,	63 '79 H
Caldwell, John Williamson, 3rd,	Atlanta, Ga.,	7 E W
*Callaway, Lambert Spencer,	Atlanta, Ga.,	11 Madison St.
Cameron, Donald Kenzie,	Antrim, N. H.,	11 N W
Carey, Anthony Morris, Jr.,	Baltimore, Md.,	84 P
Carpenter, Lucien Bonaparte,	Ardmore, Pa.,	4 B
Carter, Burnham,	New York, N. Y.,	104 B
Case, Everett Needham,	Plainfield, N. J.,	104 B

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

Cavanagh, Stuart Henry,	Utica, N. Y.,	33 '79 H
Chick, John Bradley,	Titusville, Pa.,	244 C'y
†Chisholm, Henry Lawrence,	Morristown, N. J.,	101 P
Clark, Byron, 3rd,	Brooklyn, N. Y.,	452 C'y
Coffin, Rogers Caldwell,	Minneapolis, Minn.,	42 H
*Coleman, Charles Rose,	Little Rock, Ark.,	7 S W
†Comstock, George Carlton, Jr.,	New York, N. Y.,	12 '79 H
*Cook, Kalman Spelletich,	Davenport, Iowa,	12 '79 H
Cooke, George Joseph, Jr.,	Chicago, Ill.,	185 L
†Cooper, Joseph Walter, Jr.,	Philadelphia, Pa.,	23 P
Copeland, Charles Daniel, Jr.,	Greensburg, Pa.,	94 P
*Corbett, Frank Thornton,	New York, N. Y.,	1 U P
Corcoran, Francis Leo,	Brookline, Mass.,	Cottage Club
Cottier, Hamilton,	Scarsdale, N. Y.,	184 L
Cowan, Arthur Joseph,	Harrison, N. Y.,	60 P
Cowan, Percy Bertine,	Glen Cove, L. I.,	16 N W
Craig, George Liggett, Jr.,	Pittsburgh, Pa.,	154 L
*Cramer, William Edward Wilmerding,	Troy, N. Y.,	12 A H
Cudlipp, William Allan,	Jersey City, N. J.,	84 B
Cuff, Albert Lionel,	Pittsburgh, Pa.,	411 C'y
Cuningham, John Francis,	Media, Pa.,	4 S R
Cunningham, Howard,	Pasadena, Calif.,	17 B
Currie, John Mitchell,	Franklinville, N. Y.,	25 M D
Cushman, Larimer Alanson, Jr.,	Magotha, Va.,	53 C
Daniels, Robertson Balfour,	Washington, D. C.,	64 H
Davies, George Kalb,	Salt Lake City, Utah,	5 W M W
*Davis, Malcolm Southard,	New York, N. Y.,	A B
de Coningh, Edward Hurlbut,	Chicago, Ill.,	107 P
De Long, Edmund Shackelford,	Kansas City, Mo.,	143 C'y
Denby, Charles, Jr.,	Washington, D. C.,	131 L
*Dickenson, Melville Pierce,	Binghamton, N. Y.,	11 S D
Dickinson, Hunt Tilford,	New York, N. Y.,	43 P
Dilworth, Harrison Parry, Jr.,	Pittsburgh, Pa.,	95 B
Dixon, Bryant H.,	Boonton, N. J.,	Campus Club
Downs, Donald,	Washington, D. C.,	4 W W
Dunkak, William Henry,	New York, N. Y.,	321 C'y
Dunn, Arthur, Jr.,	New York, N. Y.,	309 H'm
Dunn, Edward Klein,	Cockeysville, Md.,	61 P
Dunn, Eugene Stevenson,	Paterson, N. J.,	5 W B
*Dunn, John Fordham,	Larchmont, N. Y.,	16 M D
Eckfeldt, Edward Hooper, Jr.,	Orange, N. J.,	217 Nassau St.
Eddy, Herbert Harris,	New Rochelle, N. Y.,	8 S R
Engle, Joseph Redman,	Haddonfield, N. J.,	6 N D
Ewald, Edwin Coyne,	Jersey City, N. J.,	54 C
Fay, Edwin Bilger,	Houston, Texas,	217 Nassau St.
Fell, David Braman,	Ogontz, Pa.,	24 N E
*Fierlein, James Baxter,	Evanston, Ill.,	151 L
†Fleming, Matthew Corry, Jr.,	New York, N. Y.,	Ivy Club
*Floan, Albert Edward,	St. Paul, Minn.,	9 E B
Forbes, Daniel Steele,	Hawthorne, N. Y.,	16 S M R
Forgan, James Russell,	Chicago, Ill.,	A B

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

Forrest, Wilfred Penn,	Brooklyn, N. Y.,	6 E M W
Fort, Josiah Gill,	Clarksville, Tenn.,	3 A C
Fox, Sheldon,	Ridgewood, N. J.,	42 '79 H
*Frank, Harry, Jr.,	New York, N. Y.,	104 H
*Fuldner, Mansfield Charles,	New York, N. Y.,	8 Hill
Garrity, Martin Henry, Jr.,	Newton Highlands, Mass.,	8 L P
Gotshalk, Dilman Walter,	Trenton, N. J.,	5 A C
Griffin, Paul Frederick,	Lock Haven, Pa.,	48-58 P
Grogan, William Herbert,	Newark, N. J.,	88 B
Hackney, Hiram Hamilton,	Uniontown, Pa.,	43 P
*Hale, Chandler, Jr.,	Washington, D. C.,	5 B
Hale, William Ellery,	South Pasadena, Calif.,	42-52 P
Hall, Alton Parker,	Esopus, N. Y.,	15 B
Handler, Charles,	Newark, N. J.,	Nassau Inn
Hardin, Parker Calhoun,	Ithaca, N. Y.,	5 E M W
Hargroves, Vernon Carney,	Churchland, Va.,	83 Jefferson Rd.
Harrison, Edmund Pendleton Hunter, Jr.,	Bel Air, Md.,	59 Wiggins St.
Hart, Henry Carlton,	Ambler, Pa.,	241 C'y
†Hawke, William Bartles,	Flemington, N. J.,	11 S W
Heller, Ernest Seton,	New York, N. Y.,	16 Edwards Pl.
Henderson, Branton Holstein,	New Castle, Pa.,	104 P
Henderson, Robert Lawrence,	Youngstown, Ohio,	351 C'y
Hensel, H. Struve,	Tenafly, N. J.,	3 A H'm
Hess, John Jacob,	Spokane, Wash.,	51 L
†Hewitt, Theron,	Williamsburg, Pa.,	31 A S
Hewitt, William Wilson,	Brooklyn, N. Y.,	Campus Club
*Hicks, Thomas Edward, Jr.,	Brooklyn, N. Y.,	322 C'y
Higley, Philo Hall,	Hinsdale, Ill.,	116 B
Hole, William Edward,	Versailles, Ohio,	2 S E B
Hollander, George Carol,	New York, N. Y.,	141 C'y
Hooper, Robert Poole, Jr.,	Philadelphia, Pa.,	83 P
Hopkin, Charles Edward,	Germantown, Pa.,	26 M D
*Hotchkin, Arthur Howard,	Binghamton, N. Y.,	24 P
†Irons, Henry Clay, Jr.,	New York, N. Y.,	154 L
Irons, William Giberson, 2nd.,	New York, N. Y.,	141 L
Irwin, Samuel Browning,	Lansdowne, Pa.,	102 B
Jackson, Archibald Blake,	St. Paul, Minn.,	22 H'm
Jackson, Ransom Joseph,	Little Rock, Ark.,	332 C'y
Jackson, Schuyler Brinckerhoff,	New York, N. Y.,	66 Wash. Rd.
Jarrell, A. J., Jr.,	Temple, Texas,	Campus Club
Johnson, Reginald Lee,	New York, N. Y.,	16 B
†Johnson, Wharton Vail,	South Orange, N. J.,	31 P
Jones, Louis Winchester,	Santa Barbara, Cal.,	42 P
Kaltenbach, Henry Julius, Jr.,	Yonkers, N. Y.,	22 H'm
Keeney, Morton,	Grand Rapids, Mich.,	63 P
Kennedy, Mark Hamby,	Wheeling, W. Va.,	4 W B
*Kent, William Robert,	St. Joseph, Mich.,	171 L
King, Edward Stauffer,	Baltimore, Md.,	8 S D
Kingsley, William Joseph,	New York, N. Y.,	12 W B

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

Kirk, Rudolf,	Olney, Md.,	13 S D
Kneedler, William Harding,	Philadelphia, Pa.,	6 N D
Knepper, Frederick Thayer,	Sioux City, Iowa,	12 B
La Branche, George Michel Lucien, Jr.,	Pelham, N. Y.,	24 B
*Laflin, Louis Ellsworth, Jr.,	Princeton, N. J.,	95 B
Lambert, Arthur Gorman,	Washington, D. C.,	101 B
Lane, Nathan Taylor,	Ocea Grove, N. J.,	Ocean Grove, N. J.
†Little, Franklin Rockafellow,	Canon City, Colo.,	308 H'm
*Livingston, Joseph Shaw,	Philadelphia, Pa.,	16 L
Loos, George William, Jr.,	Haddonfield, N. J.,	26 M D
Lourie, Donald Bradford,	Peru, Ill.,	181 L
Love, George Hutchinson,	Johnstown, Pa.,	181 L
Love, William Edmund,	Princeton, N. J.,	131 L
Lukens, Charles Pennington, Jr.,	Parkesburg, Pa.,	65 B
†Lynch, John Howard, Jr.,	Harrisburg, Pa.,	B S
Lyon, James Pollion,	Short Hills, N. J.,	34 '79 H
McCamant, Thomas,	Portland, Ore.,	18 M D
†McCarter, Thomas Nesbitt, Jr.,	Rumson, N. J.,	22 C
McCarthy, Franklin Alexander,	Elizabeth, N. J.,	52 H
McClenahan, John Megredy,	Princeton, N. J.,	12 S W
McCoy, John Franklin, Jr.,	Sussex, N. J.,	3 C H'm
MacCready, William Beattie,	New York, N. Y.,	10 W M W
McDonald, Alexander Donald,	Aurora, Ill.,	242 C'y
MacDougall, Robert Gordon,	Montclair, N. J.,	32 B
McEachin, Thomas Covington, Jr.,	Jacksonville, Fla.,	133 L
McFerran, Watson Barr,	Louisville, Ky.,	1½ H'm
McIlvaine, William Brown, Jr.,	Chicago, Ill.,	32 '79 H
McIlwain, George Irwin,	Cambridge, Mass.,	23 B
McKnight, Francis Harlan,	Pittsburgh, Pa.,	8 B H
MacPhee, Walter Scott,	Brooklyn, N. Y.,	Cap & Gown Club
†Mallory, Francis Bolton,	Omaha, Nebr.,	52 Jefferson Rd.
Manchee, Arthur Leavens,	Newark, N. J.,	31 C
Massey, William Everett, Jr.,	Philadelphia, Pa.,	32 '79 H
*Matsumoto, Kanejiro,	Chikuzen, Japan,	36 Univer. Pl.
Matthews, Thomas Stanley,	Princeton, N. J.,	241 C'y
Maull, Baldwin Springer,	Wilmington, Del.,	5 L P
Maxwell, Eugene Lascelles,	New York, N. Y.,	138 Nassau St.
Mayor, Alpheus Hyatt,	Princeton, N. J.,	Cuyler Farm
Meek, Wilbur Thornton,	Orleans, Nebr.,	215 H S
Mellon, Matthew Taylor,	Pittsburgh, Pa.,	66 C
Merritt, Schuyler, II.,	Yonkers, N. Y.,	Colonial Club
Millard, Austin Jayne,	Newton, N. J.,	66 Nassau St.
Miller, Charles Roberts,	New York, N. Y.,	51 H
*Miller, Henry Durben,	Newark, N. J.,	40 P
*Millholland, James Allaire,	Washington, D. C.,	22 H
*Milne, Sidney Wentworth,	Philadelphia, Pa.,	138 Nassau St.
*Morgan, Alexander Perry,	Princeton, N. J.,	Ivy Club
Morgan, Richard Pugh,	Johnstown, Pa.,	114 B
Morton, John Dwight,	Boston, Mass.,	53 '79 H
Moser, Paul David,	New York, N. Y.,	171 L

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

Motter, Thomas Hubbard Vail,	Washington, D. C.,	5 W B
Murphey, Smith,	Sumner, Miss.,	341 C'y
Murray, Thomas Frederic,	North Bend, Pa.,	21 N E
*Myer, Sterling, Jr.,	Houston, Texas,	230 Nassau St.
Myers, Darwood Gillespie,	New York, N. Y.,	12 H'm
Nelden, Aaron Griggs,	Stanhope, N. J.,	5 W B
North, John Paul,	Buffalo, N. Y.,	2 N D
Osborn, John Draper,	Minneapolis, Minn.,	44 H
Page, Charles Greenleaf,	Cincinnati, Ohio,	61 B
Page, Edward Sydenham, Jr.,	Devon, Pa.,	102 B
Page, Francis Le Moyne,	Pittsburgh, Pa.,	153 L
*Palmer, Alexander Purves,	Trenton, N. J.,	3 A C
Penney, Robert Sheaff,	Minneapolis, Minn.,	43 L
Poe, John Prentiss,	Baltimore, Md.,	12 S W
Pope, James Noble,	Jersey City, N. J.,	432 C'y
Post, Frank Lester,	Paterson, N. J.,	1 A H
*Powell, Robert Irwin,	New York, N. Y.,	310 H'm
*Pressinger, Whitefield Price, Jr.,	Sands Point, L. I.,	217 Nassau St.
*Rabinowitz, Samuel Mordecai,	Trenton, N. J.,	16 Spruce St.
Ramsay, John Breckinridge, Jr.,	Baltimore, Md.,	84 P
Ravenel, Daniel, Jr.,	Charleston, S. C.,	96 B
Reeve, Warren Scott,	Lancaster, Pa.,	6 N R
*Reynolds, Eugene Benton, Jr.,	Brooklyn, N. Y.,	98 B
Reynolds, John Murray,	New York, N. Y.,	94 P
†Rhodes, John Bower,	Pittsburgh, Pa.,	104 P
Riccardi, Gerard Armand,	Newark, N. J.,	10 N W
*Richardson, David Welles,	Katonah, N. Y.,	263 C'y
Robins, Henry Naglee Ringgold,	Philadelphia, Pa.,	8 E M W
Robinson, Charles Alexander, Jr.,	Peekskill, N. Y.,	23 B
Rodgers, John Thomas,	Springfield, Ohio,	52 B
Rodgers, Oliver,	Pittsburgh, Pa.,	A B
Roessler, Ernest Carl,	Chicago, Ill.,	116 B
Rosborough, Angus Baker,	Jacksonville, Fla.,	133 L
Rose, George, III.,	Washington, D. C.,	412 C'y
Roudebush, Francis Wilshire,	Memphis, Tenn.,	332 C'y
Rutter, David Ryerson,	Washington, D. C.,	97 B
†Ryan, John Roselle Tucker, II.,	Indianapolis, Ind.,	Cottage Club
Scarff, James Gorton,	Bellefontaine, Ohio,	21 B
Scarlett, Raymond Gordon,	Baltimore, Md.,	84 P
Schrauff, William Bernard,	Jersey City, N. J.,	84 H
Schutte, Frederick Alexander,	Brooklyn, N. Y.,	10 N D
Scull, Richard Barclay,	Camden, N. J.,	138 Nassau St.
Shaffer, Clarence Claire,	Shelocta, Pa.,	1 N E
Shea, George Edward, Jr.,	New York, N. Y.,	6 E W
*Sheldon, George William,	Summit, N. J.,	2 W B
Sheppard, Ernest Wendenhall,	Wilmington, Del.,	18 S E
Shipway, Charles Morgan,	Charleston, S. C.,	18 B
Simpson, Alexander,	Englewood, N. J.,	2 S D
†Singleton, Edwin Lewis,	New York, N. Y.,	21 P
*Slagle, Alexander Russell,	Baltimore, Md.,	51 C

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

Sloane, Charles O'Conor,	New York, N. Y.,	331 C'y
Smith, Charles Willard,	Greensburg, Pa.,	10 S M R
Smith, Edwin Ginnelley,	Trenton, N. J.,	3 N R
*Smith, Van Zandt,	Fort Worth, Texas,	152 L
Smith, William Walter,	Providence, R. I.,	44 '79 H
Snell, Watson Ballard,	Toledo, Ohio,	18 N W
Snyder, Eldredge,	Summit, N. J.,	112 L
Spencer, Walker Brainerd, Jr.,	New Orleans, La.,	21 Olden St.
Stengel, George Douglas,	Lititz, Pa.,	37 Wiggins St.
Stephan, Audley Hobson Frederick,	Trenton, N. J.,	38 L
Stevens, Richard Kingsbury,	Meriden, Conn.,	43 L
Stevenson, Adlai Ewing,	Bloomington, Ill.,	42 P
Stevenson, William Edwards,	Princeton, N. J.,	322 C'y
Stewart, Paul Wellington,	East Orange, N. J.,	138 Nassau St.
Strean, James Gilmore, Jr.,	Kansas City, Mo.,	144 C'y
Sturhahn, Roland Ernst Edwin,	St. Louis, Mo.,	20 S W
Sutton, Raymond Parker,	Newark, N. J.,	6 S W
Swede, Allen,	Norristown, Pa.,	Cap & Gown Club
Tait, Robert Crittenden,	Rochester, N. Y.,	31 B
Talbott, George Harold,	Kansas City, Mo.,	11 Edgehill St.
†Taylor, Oliver Forrester,	Morristown, N. J.,	11 U P
Tennant, George Grant, Jr.,	Jersey City, N. J.,	2 E B
*Thomson, Samuel Harrison,	Princeton, N. J.,	11 A S
Todd, Webster Bray,	New York, N. Y.,	153 L
Trimble, Isaac Ridgeway,	Baltimore, Md.,	61 P
Tucker, William Ashton,	Philadelphia, Pa.,	43 P
Tureman, Robert Walpole,	Kansas City, Mo.,	351 C'y
Turner, Albert Bristol,	Chappaqua, N. Y.,	2 W B
Turner, Hubert Thornton,	North Bennington, Vt.,	1 W B
Tuttle, Clifford Horace,	Woodmont, Conn.,	9 N D
*Tuttle, William Gerard,	New York, N. Y.,	73 B
Ulman, Morrison,	New York, N. Y.,	14 H'm
Van Sant, Edward Raguet,	State College, Pa.,	6 N R
Vaughn, Burton Edwards,	Little Rock, Ark.,	138 Nassau St.
Vedder, Palmer Wallace,	Schenectady, N. Y.,	8 L P
Voorhees, Romeyn Van Zandt,	Plainfield, N. J,	66 Nassau St.
Wainwright, John Tillotson,	Philadelphia, Pa.,	43 P
Ward, Douglas,	Orange, N. J.,	42 P
†Ward, Harold Lee,	Orchard Lake, Mich.,	86 Stockton St.
Warner, George Coffing, Jr.,	New Hope, Pa.,	6 W W
Warner, Rollin Miles,	Muncie, Ind.,	8 S E B
Wasserman, William Stix,	Philadelphia, Pa.,	61 C
Webb, Charles Grosvenor,	Wellsboro, Pa.,	5 W W
Wells, Arthur Atkinson,	Newell, W. Va.,	34 H
West, Mahlon Ogden,	Chicago, Ill.,	153 L
West, William Armstrong,	Beirut, Syria,	11 N W
Whelan, Carl Joseph,	Island Falls, Maine,	10 Moore St.
Widenmann, George August,	Westfield, N. J.,	2 W M W
Wilson, Donald Orr,	Binghamton, N. Y.,	11 S D
Winfield, James Macfarlane, Jr.,	Brooklyn, N. Y.,	98 B

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

Winton, Charles Joel, Jr.,	Minneapolis, Minn.,	27 C
*Wintringer, Robert Ledlie,	Steubenville, Ohio,	22 P
Wisner, Herbert Lawrence,	New York, N. Y.,	111 L
Wood, Francis Clark,	Wooster, Ohio,	Charter Club
*Woodruff, Victor Dewey,	Nutley, N. J.,	88 B
Woods, Edward Wallis,	Sewickley, Pa.,	2 E B
Woods, Lawrence Crane, Jr.,	Pittsburgh, Pa.,	28 C
Woolverton, Frederick Tappen,	Scarsdale, N. Y.,	185 L
Wright, George Carr,	Lincoln University, Pa.,	4 S R
Yager, Newton Thomas, Jr.,	Louisville, Ky.,	Pyne Bldg.
Yang, Hwan Tao,	Tientsin, China,	40 Moore St.
Young, De Witt Breed,	New York, N. Y.,	42 '79 H
Young, Henry, III.,	Bernardsville, N. J.,	108 P
Zabriskie, Kenneth Hastings,	Oradell, N. J.,	22 H

A.B. Seniors 302

CANDIDATES FOR THE DEGREE OF B.S.

*Alford, Oliver Perry,	Flushing, L. I.,	Campus Club
Anderson, Elliott Monroe,	Brooklyn, N. Y.,	141 L
*Arnold, Alfred Dashiell,	New York, N. Y.,	217 Nassau St.
Arpee, Edward,	Athens, Ohio,	Murray-Dodge
*Bechman, Frederic William,	Kankakee, Ill.,	106 Broadmead
*Belt, Fletcher Le Roy,	Chevy Chase, Md.,	217 Nassau St.
Blake, Theodore Dockstader,	New York, N. Y.,	21 H
Bogert, Albert Curtis,	Oradell, N. J.,	28 C
*Bray, Theodore Matthews,	Youngstown, Ohio,	14 P
Brent, William Rufus,	Los Angeles, Calif.,	9 S E
Brodhead, James Easton,	Kingston, Pa.,	108 P
*Brooke, Robert Clymer,	Birdsboro, Pa.,	132 H
Brown, George Elmer,	Pottstown, Pa.,	7 A H
*Burns, Robert Lee,	Wichita, Kans.,	5 S M R
†Bushnell, Asa Smith,	Springfield, Ohio,	184 L
Carruth, Edward Bennett,	San Antonio, Texas,	20 P
Cates, MacFarlane Lafferty,	Spartanburg, S. C.,	421 C'y
†Colburn, Kenneth Leonard,	Los Angeles, Calif.,	2 S W B
Collins, Edward Morris,	New York, N. Y.,	5 A C
Cramp, William Miller,	Philadelpnia, Pa.,	112 L
*Cunningham, Allen,	Joplin, Mo.,	152 L
Curtis, Bartow Strang,	Elmira, N. Y.,	25 C
Davidson, Donald Neal,	Boise, Idaho,	2 S W B
*Day, Morgan Coit,	St. Louis, Mo.,	Quadrangle Club
*Deming, Chauncey Merrill,	Los Angeles, Calif.,	33 '79 H
Dodd, Stuart Carter,	New York, N. Y.,	Gateway Club
Drennon, Charles Cleveland,	Kansas City, Mo.,	351 C'y
Drummond, Thomas Kenneth,	New York, N. Y.,	112 L
*Ducas, Robert,	New York, N. Y.,	162 L
Eastman, Robert William,	Mt. Vernon, Ohio,	5 N R
*Erdman, Sturtevant,	New York, N. Y.,	111 H
Erickson, Elmer Clarence,	Verona, N. J.,	3 C H

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

Evans, Ray Marshall,	Essex Fells, N. J.,	21 H
Farish, Hunter Dickinson,	Beatrice, Ala.,	32 Wiggins St.
Ferlaino, Frank R.,	Brooklyn, N. Y.,	1 B
Forbes, John Alexander,	Rockford, Ill.,	24 B
†Forbes, Robert Laton,	Weston, Mass.,	23 P
Ford, Harold Richards,	Redlands, Calif.,	43 B
Foster, Francis Budlong,	Westboro, Mass.,	2 W M W
Frazier, Charles Henry,	Morristown, N. J.,	Charter Club
Gable, Herman Carson,	Melrose Park, Pa.,	31 H
Getze, Edward Bioren, Jr.,	Philadelphia, Pa.,	60 P
Gignilliat, Leigh Robinson, Jr.,	Culver, Ind.,	Colonial Club
*Glick, Naaman,	Pittsburgh, Pa.,	2 E W
†Goodner, Sydney Merritt,	Peoria, Ill.,	7 L P
Gordon, Lindell, Jr.,	St. Louis, Mo.,	101 B
*Gould, Edward Wanton, Jr.,	New York, N. Y.,	Ivy Club
Hills, Carroll Beardsley,	Auburn, N. Y.,	112 B
Holmes, Elmore,	Memphis, Tenn.,	19 N W
Hurst, William Bell, Jr.,	Baltimore, Md.,	138 Nassau St.
Hutchinson, John Dunbar,	Trenton, N. J.,	8 B H
Ingersoll, John Hobart Warren,	Philadelphia, Pa.,	U P
Iredell, Harry Hyde,	Long Beach, Calif.,	25 C
Jett, Richard Scudder,	Richmond, Ky.,	24 L
*Kane, Elisha Kent, Jr.,	Kushequa, Pa.,	2 M D
Keating, Thomas James, Jr.,	Centreville, Md.,	5 S W B
†Keck, James Stanton,	Greensburg, Pa.,	Elm Club
*Kelsey, Albert Washburn,	Philadelphia, Pa.,	32 B
*Kilgus, Edgar Oscar,	Newark, N. J.,	5 A H
King, Herbert George,	New York, N. Y.,	84 B
*Kinnear, Edwin Raymond,	Chicago, Ill.,	28 C
Knowles, George Milton,	Colorado Springs, Colo.,	6 E M W
Koth, Herbert B.,	Bay City, Mich.,	7 A H
*Lauer, Wilkin Lillibridge,	Port Allegany, Pa.,	2 M D
*Lawson, Randolph,	Philadelphia, Pa.,	14 B
Leon, Jacob Henry,	Haddonfield, N. J.,	36 L
Lewis, John Barbey,	New York, N. Y.,	70 P
McBride, Walter Paul,	Chicago, Ill.,	184 L
McCord, Robert Farrington,	Greenwich, Conn.,	13 B
McJunkin, Everil Kerr,	New York, N. Y.,	10 N D
McNamara, Thomas Henry,	Roxbury, Mass.,	Cannon Club
McVay, Martin Scott,	Marion, Ohio,	12 H
Mandell, Joseph Lewis,	Pittsburgh, Pa.,	71 L
Mansfield, Richard Huntington,	West Brighton, S. I.,	17 B
Mapletoft, Robert Smith,	Newark, N. J.,	3 N D
Marsh, Ogden Tiffany,	Hempstead, L. I.,	7 B H
*Martin, William Robert,	Corbin, Ky.,	65 B
Maynard, David Macrum,	Claremont, Calif.,	2 N E
*Mellis, Donald Bernard,	Belleville, N. J.,	26 C
*Miles, Herbert Haynes,	Jersey City, N. J.,	40-50 P
*Miller, Edward Kitzmiller,	Sewickley, Pa.,	72 L
Mitchell, John Jay, 3rd,	St. Davids, Pa.,	52 '79 H

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

Mueller, Reginald Sterling,	Lakewood, N. J.,	44 L
*Murtland, Wilfrid,	Pittsburgh, Pa.,	138 Nassau St.
Newlin, Richard Shipley,	Whitford, Pa.,	11 '79 H
Nichols, George Harris,	Greenwich, Conn.,	Tower Club
Osterholt, Russell Breese,	Los Angeles, Calif.,	A E B
Oxholm, Theodor,	West New Brighton, S. I.,	17 B
Ozias, Ramon Egner, Jr.,	Newark, N. J.,	40-50 P
Peard, Frank Furnival, Jr.,	Baltimore, Md.,	108 B
*Phillips, Frederick Morris,	Philadelphia, Pa.,	8 W W
Platt, Joseph Curtis, 3rd,	Scranton, Pa.,	10 S D
Porter, Baillie Price,	Roland Park, Md.,	51 C
Raynolds, Arthur Hidden,	New York, N. Y.,	Nassau Inn
Regan, Arthur Christie,	Minneapolis, Minn.,	52 H
†Reps, Donald William,	Cedar Rapids, Iowa,	68 '79 H
Robertson, Guy Morgan,	Clendenin, W. Va.,	122 H
Ross, James Alexander, Jr.,	New York, N. Y.,	Cap & Gown Cl'b
Rossin, Edgar Lewis,	New York, N. Y.,	104 H
Rowley, William Thurston,	Hartford, Conn.,	16 B
*Sage, Henry Eno,	Hartford, Conn.,	64 L
Saums, William Alton,	Trenton, N. J.,	10 W M W
Schenck, Courtlandt Kisterbock,	Philadelphia, Pa.,	12 A H
Schlotterer, Raymond Charles,	Philadelphia, Pa.,	6 W M W
Schofield, Franklin Perry,	Washington, D. C.,	9 N M R
Scholl, Robert Hargest,	Tenafly, N. J.,	26 N E
Shriver, Van Lear Perry, Jr.,	Sewickley, Pa.,	63 P
Sinclaire, John,	Corning, N. Y.,	138 Nassau St.
Sinclaire, Murray,	Corning, N. Y.,	24 L
Skelding, Henry Titus,	Southbury, Conn.,	15 B
Slawson, John Hoyt,	Spokane, Wash.,	51 L
Smith, Chapman Tyson,	Philadelphia, Pa.,	20 N W
Smith, Hulet Pieper,	Minneapolis, Minn.,	44 H
Stabler, Edgar Hallowell,	Ednor, Md.,	14 S W
Stilson, Edward, Jr.,	Cortland, N. Y.,	20 P
Stinson, Edward, Jr.,	Baltimore, Md.,	70 P
Stout, William Howard,	Fort Scott, Kan.,	441 C'y
Swann, Sherlock, Jr.,	Baltimore, Md.,	64 H
Tallman, John Lathrop,	Syracuse, N. Y.,	Cottage Club
†Talmage, Thomas Hunt,	New York, N. Y.,	Rosedale Road
Thomson, Sanford Knapp,	New Britain, Conn.,	8 S R
Tilden, Louis Edward,	Chicago, Ill.,	184 L
Tim, Louis de Jonge,	New York, N. Y.,	2 B
Toensmeier, John Arthur,	Youngstown, Ohio,	3 S R
Tyson, Paul Lawrence,	Princeton, N. J.,	20 N W
Vila, Joseph Spencer,	New York, N. Y.,	P
*Vogel, Rudolph Emerson,	Milwaukee, Wis.,	A B
Wadleigh, Francis Rawle, Jr.,	New York, N. Y.,	2 S D
Wells, Robert Carlton,	Brownsville, Texas,	33 H
†Wenger, Roy Harper,	Chambersburg, Pa.,	3 C H'm
Whitehead, Charles Franklin,	Kansas City, Mo.,	53 B
Whittingham, Richard Harrison,	Millburn, N. J.,	9 N E

† Candidate for degree in February 1922.
* Candidate for degree in February 1923.

*Williams, Winthrop Taylor,	Independence, Mo.,	12 H
Williamson, Ralph Elmore,	Minneapolis, Minn.,	27 C
*Wineburgh, Henry Harold,	New York, N. Y.,	2 B
Witherspoon, Jackson Thornwell,	New Orleans, La.,	185 L
Wittmer, Albert, Jr.,	Pittsburgh, Pa.,	Cannon Club
*Zabriskie, George Albert,	New York, N. Y.,	24 '79 H

B.S. Seniors 138

CANDIDATES FOR THE DEGREE OF C.E.

Andrews, Robert M.,	Harrisburg, Pa.,	34 N E
Bingham, John Armour, Jr.,	Forest Hills, N. Y.,	6 W M W
Blackwell, Francis Ogden, Jr.,	New York, N. Y.,	33 L
Blodget, Lorin Theodore,	Mt. Holly, N. J.,	61 L
Cartier, Harold Augustus,	Charlevoix, Mich.,	Key & Seal Club
Chapman, Clifford Frederick,	Elizabeth, N. J.,	40-50 P
Cresswell, Hugh Catherwood,	Philadelphia, Pa.,	138 Nassau St.
Davis, Raymond Johns,	Cathay, N. D.,	23 L
Dittig, William Ferdinand,	Montclair, N. J.,	1 W W
Dyer, Addison Lysle,	Easton, Pa.,	53 B
Harvey, Harold Austin,	Cambridge, Mass.,	15 S W
Hungerford, Clark,	Greenville, S. C.,	33 L
Jiranek, Leo August,	Grand Rapids, Mich.,	62 P
Kenworthy, Nelson A.,	Plainfield, N. J.,	451 C'y
McMillan, Andrew,	Riverdale-on-Hudson, N. Y.,	3 A H'm
Meyers, George Roberts,	Bellwood, Pa.,	2 C H'm
Pardoe, William Ewart,	Johnstown, Pa.,	9 S M R
Pessagno, Emile Anthony,	Washington, D. C.,	17 S M R
Richardson, Hugh Inman,	Atlanta, Ga.,	52 '79 H
Rule, George Benjamin,	New Brunswick, N. J.,	61 L
Swenson, Oscar,	Arlington, N. J.,	15 S M R
von Schilling, Franz, Jr.,	Port au Prince, Haiti,	83 Jefferson Rd.

Engineering Seniors 22

JUNIOR CLASS, 1923

CANDIDATES FOR THE DEGREE OF A.B.

Allen, Leigh Wilton,	Mansfield, Pa.,	35 P
Ancona, Sydenham Elnathan, 3rd.,	Reading, Pa.,	4 W M W
Archer, Franklin Morse, Jr.,	Haddonfield, N. J.,	82 P
Arnold, Bridgewater Meredith, Jr.,	Orange, N. J.,	10 S E B
†Aull, James Andrew, 3rd.,	Norristown, Pa.,	14 B
Avidan, Alexander,	Newark, N. J.,	13 S W
Baldeagle, Joseph Paul,	Philadelphia, Pa.,	16 M D
Ball, Robert Hamilton,	New York, N. Y.,	222 C'y
Bard, Philip,	Hueneme, Calif.,	1 A C
Barrett, Joseph Russell,	Flushing, L. I.,	5 U P
Barrows, Kenneth Willard,	Philadelphia, Pa.,	91 P
Batchelar, Edmund Jackson,	Jersey City, N. J.,	33 P
Baum, Maurice,	Fort Wayne, Ind.,	14 S E

* Candidate for degree in February 1923.
† Failed of promotion.

Berg, Morris,	Newark, N. J.,	6 S W
Bernheim, Leonard Henry,	New York, N. Y.,	301 H'm
Bertolet, Charles Boileau,	Reading, Pa.,	9 S W B
Best, James Irvin,	Minneapolis, Minn.,	99 P
Bond, Robert Wallace,	So. Orange, N. J.,	361 C'y
Bovaird, George Crary,	Clifton Springs, N. Y.,	15 P
Boyd, Alden Work,	Paterson, N. J.,	19 E B
Boynton, Charles Edward, Jr.,	Atlanta, Ga.,	30 Bank St.
Brennan, Ledwith John,	New Rochelle, N. Y.,	31 B
Brewster, Lewis Oakley, Jr.,	Elizabeth, N. J.,	11 H'm
Brown, Beverley Minturn,	Great Neck, L. I.,	36 Vandeventer Ave.
*Brown, William Henry, Jr.,	Pittsburgh, Pa.,	4 U P
Buck, Jerome Campbell,	Elmira, N. Y.,	10 S D
Buford, James Leslie,	Franklin, Tenn.,	61 '79 H
Burns, J. Rouse,	New York, N. Y.,	80 P
*Butler, James Temple, Jr.,	Princeton, N. J.,	15 Jefferson Rd.
Byrley, Paul Lock,	Atlanta, Ga.,	19 E B
Caldwell, Leslie Godfrey,	Pittsburgh, Pa.,	Aiken & Princeton Aves.
Campbell, Alan Bird,	Pleasantville, N. Y.,	9 W B
Campbell, Alfred Stuart,	Elizabeth, N. J.,	191 H
*Carney, John Vincent,	New York, N. Y.,	98 S E
Carr, Rowland,	New York, N. Y.,	10 Nassau St.
Carrick, Alan White,	Jersey City, N J.,	413 C'y
Carter, Herbert Swift, Jr.,	New York, N. Y.,	68 B
Carter, Macauley,	Toledo, Ohio,	199 L
Causey, James Tuthill,	Denver, Colo.,	8 W B
Chapman, Frank Michler, Jr.,	New York, N. Y.,	Cannon Club
*Cobb, Andrew Lemuel, Jr.,	Boonton, N. J.,	24 '79 H
Cole, Malcolm Lewis,	New York, N. Y.,	7 S E B
*Collinson, Harry Noyes,	Hazleton, Pa.,	6 N R
Cooper, John Crossan, Jr.,	Baltimore, Md.,	41 H
Cornwell, Edward Allaire,	Red Bank, N. J.,	5 S E B
Courtney, William Roeschel,	Sedalia, Mo.,	184 H
Covington, R. Wells, Jr.,	Bowling Green, Ky.,	51 '79 H
Cushing, Leonard Jarvis,	New York, N. Y.,	181 L
*Cuyler, Richard Matthael,	Princeton, N. J.,	16 S W
Dailey, Louis Bird, Jr.,	E. Orange, N. J.,	69 L
Danforth, Frederick Wilcox,	Buffalo, N Y.,	9 N D
Dashiell, Alfred Sheppard,	Snow Hill, Md.,	6 S W B
Davis, Everett Lee,	Waco, Texas,	99 L
Davis, James Edward,	Clarksburg, W. Va.,	161 L
Delafield, Maturin Livingston, II,	New York, N. Y.,	39 C
Dexter, Byron Vinson,	Newark, N. J.,	34 P
Dinsmore, Archibald Alexander, Jr.,	Philadelphia, Pa.,	36 P
Dolan, John Joseph,	Washington, D. C.,	131 H
Dudley, Gordon Bee,	Brooklyn, N. Y.,	1 U P
Ecker, Joseph Thomas,	Reading, Pa.,	4 W M W
Elliot, Robert Sherrard, Jr.,	New York, N. Y.,	96 C
Elliott, Edwin Boyd,	Chevy Chase, D. C.,	52 Jefferson Rd.
Ellis, Franklin Courtney,	Swarthmore, Pa.,	31 '79 H
*Ewing, Joseph Marquis,	Philadelphia, Pa.,	68 B S

* Failed of promotion.

Farny, Cyril,	Morris Plains, N. J.,	186 L
*Ferguson, Robert Gowan,	Great Falls, Mont.,	8 U P
Find, John Thomas,	New York, N. Y.,	59 Wiggins St.
Findley, Thomas Palmer, Jr.,	Omaha, Nebr.,	81 B
Fisher, Louis McLane,	Baltimore, Md.,	211 C'y
Fite, Charles Sturges,	Princeton, N. J.,	31 N E
Fleming, Joseph Patrick,	Lawrenceville, N. J.,	86 P
Forstmann, Reinhold Heinrich,	Passaic, N. J.,	54 '79 H
Forsyth, George Howard, Jr.,	San Francisco, Calif.,	21 C
Fox, Littleton,	Ridgewood, N. J.,	64 '79 H
*Friedlich, James E.,	New York, N. Y.,	442 C'y
*Furey, William Rankin,	Pittsburgh, Pa.,	91 B
Gardner, Arthur,	Jersey City, N. J.,	232 C'y
Gardner, Esmond Brown,	New York, N. Y.,	3 B H
Gibbon, John Heysham, Jr.,	Philadelphia, Pa.,	43 '79 H
Gibbs, George Fort, Jr.,	Rosemont, Pa.,	73 H
*Gibson, James, Jr.,	Salem, N. Y.,	92 B
Gilmer, Charles Sullivan,	Harrisburg, Pa.,	71 Wiggins St.
Gilroy, Ralph Charles,	Haverhill, Mass.,	7 S D
Glass, Gerald Fitzgerald,	Pittsburgh, Pa.,	Dial Lodge
Goddard, Morrill, Jr.,	New York, N. Y.,	12 U P
Goelz, Carl George,	Cincinnati, Ohio,	16 M D
Goodspeed, Charles Albert, Jr.,	New York, N. Y.,	9 L P
Goodwin, Ellis Munson,	Newark, N. J.,	8 N W
Graham, Richard Walter, Jr.,	Baltimore, Md.,	103 H
Gray, John Alexander Clinton,	New York, N. Y.,	102 P
Green, Matthew Addy,	Cincinnati, Ohio,	1 A C
Grubbs, Henry Alexander, Jr.,	Baltimore, Md.,	13 N M R
Grummon, Stuart Edgar,	Newark, N. J.,	34 P
Gwathmey, Chris Browne, Jr.,	Brooklyn, N. Y.,	12 M D
*Hallsted, Robert Dillingham,	Evanston, Ill.,	172 Nassau St.
Hamilton, Abbott Kittredge,	New York, N. Y.,	310 H'm
*Hamilton, Stuart Wallace,	Newark, N. J.,	311 C'y
Harbert, John Coulter,	Bellefontaine, Ohio,	5 W M W
Hardin, Adlai Stevenson,	Ithaca, N. Y.,	5 E M W
Hardy, Gelston,	Philadelphia, Pa.,	62 '79 H
Hathaway, Charles,	Norristown. Pa.,	10 S E
Helliwell, Charles Harold,	Rural Valley, Pa.,	32 N E
Herndon, Hunter Venable,	Pottsville, Pa.,	311 C'y
Hilgartner, Henry Louis, Jr.,	Austin, Texas,	12 M D
Hoornbeek, John Charles,	Ellenville, N. Y.,	101 L
Hopkins, James Morsell,	Baltimore, Md.,	33 P
Horsfield, Geoffrey Maurice,	Oxford, N. C.,	16 Vandeventer Ave.
Hovenden, Thomas Houghton,	Brooklyn, N. Y.,	163 Nassau St.
Howard, Frank McClelland,	Boston, Mass.,	111 B
Howland, William Slocum,	Catskill, N. Y.,	11 N D
Hussey, John Updegraff, Jr.,	New York, N. Y.,	162 L
Jackson, Charles Tremain,	New York, N. Y.,	13 P
James, Warner Rutherford,	Brooklyn, N. Y.,	3 S E B
Jefferies, John Howard, Jr.,	Narberth, Pa.,	30 P
Jewett, John Howard,	New York, N. Y.,	62 H

* Failed of promotion.

Joffrion, Winston Kernan,	Marksville, La.,	64 '79 H
Johnson, George Leonard, Jr.,	Englewood, N. J.,	21 L
Kabet, Albert,	Pittsburgh, Pa.,	21 S E
Kaighn, George Scattergood, Jr.,	Glen Ridge, N. J.,	2 M D
Kelley, Raymond Alden,	Wyoming, N. Y.,	103 P
Kirkpatrick, Andrew,	Princeton, N. J.,	17 S W
Kleinman, Morris,	Newark, N. J.,	6 N M R
Knepper, Rudolf Edward,	Sioux City, Iowa,	12 B
Kushner, Frank Stephen,	Wilkes-Barre, Pa.,	14 N M R
Lane, Melvin Rudyard,	Mahwah, N. J.,	7 L P
Lauster, Carl F.,	Cleveland, Ohio,	52 Jefferson Rd.
*Le Roy, John Minturn,	New York, N. Y.,	66 H
*Levin, Morris Albert,	Newark, N. J.,	7 S E
Le Viness, Charles Thabor, 3rd.,	Baltimore, Md.,	106 P
Levis, Russell Tyng,	Philadelphia, Pa.,	4 E B
Lewis, Cicero Hunt, II,	Washington, D. C.,	66 H
Lloyd, Horatio Gates, Jr.,	Haverford, Pa.,	52 C
Logan, Victor Wesley,	Huchow Chekiang, China,	2 E M W
Lowe, Allan Bennett,	Baltimore, Md.,	3 U P
Lowe, John Blake,	Baltimore, Md.,	3 U P
*McAlpin, Donald Martin,	New York, N. Y.,	42 L
*McCartney, Harold Younkins,	Titusville, Pa.,	14 P
McCaull, Robert Melson,	Minneapolis, Minn.,	7 N D
McKee, James Drape,	Bellevue, Pa.,	7 W M W
McKenna, Norbert Augustin,	Englewood, N. J.,	263 C'y
McLanahan, Samuel, Jr.,	Princeton, N. J.,	12 N W
MacLaren, Malcolm, Jr.,	Princeton, N. J.,	91 H
McLean, Emerson Oran,	Mansfield, Ohio,	97 B
McNulty, Edward James,	New York, N. Y.,	136 Nassau St.
Makrauer, Saul,	Pittsburgh, Pa.,	7 E B
Marden, Nicholas Brice,	Princeton, N. J.,	15 N W
Marlatt, Ralph Emerson,	Newark, N. J.,	7 W B
Marquis, Rogers Israel,	Detroit, Mich,	41 B
Martin, John Stuart,	Chicago, Ill.,	42 L
*Mayfield, Frank Paul,	Waco, Texas,	114 H
Meeson, John Eric William,	New York, N. Y.,	7 A H
*Millsaps, William Webster,	Cleveland, Miss.,	18 N E
Miner, Henry Clay, Jr.,	New York, N. Y.,	35 L
Mitchell, Joseph Downman, Jr.,	Bristol, Va.,	98 Nassau St.
Mockridge, Harold Charles	Featherston, Philadelphia, Pa.,	41 B
Moore, Preston,	Houston, Texas,	12 B
*Morgan, William Leverette, Jr.,	Newark, N. J.,	217 Nassau St.
Mosher, John Stewart,	Manila, P. I.,	16 S W
Motley, Alfred,	Red Bank, N. J.,	5 S E B
Mulliken, John Raymond,	Minneapolis, Minn.,	80 P
Murray, Henry Steele,	Denver, Colo.,	308 H'm
*Murrey, Frank Lester,	Nashville, Tenn.,	217 Nassau St.
Nelson, Rowland Whiteway,	Bradford Yorks, England,	162 C'y

* Failed of promotion.

Newman, Arthur Lloyd, II.,	Paterson, N. J.,	16 W W
Newton, David,	Elizabeth, N. J.,	19 W W
Nichols, Charles Arthur, Jr.,	Chicago, Ill.,	18 C
Nicholson, Thomas,	Richmond, Va.,	105 H
Niemann, Kenneth Edward,	Pittsburgh, Pa.,	65 H
*Niles, Philip Bradford,	New York, N. Y.,	12 A H
Noss, Frederick Boyer,	Sendai, Japan,	3 W M W
Ober, Woodbury Swan,	Baltimore, Md.,	76 H
*Odell, Hiram Bookstaver, Jr.,	Newburgh, N. Y.,	14 P
Oehmler, Herbert Klopfer,	Pittsburgh, Pa.,	118 Nassau St.
*O'Kane, Roger Joseph,	Princeton, N. J.,	40 Wiggins St.
Orth, William Calvin,	Chicago, Ill.,	23 L
*Parke, Frank Herbert,	Little Rock, Ark.,	230 Nassau St.
Paul, Alexander Gunn, Jr.,	Watertown, Fla.,	8 U P
Pawley, Francis Raymond,	Greenwich, Conn.,	72 P
*Peck, Roderick Daniel,	Minneapolis, Minn.,	64 B
Penfield, Paul Livingstone,	Englewood, N. J.,	91 H
Pitrachat, Boon Choey,	Washington, D. C.,	16 Vandeventer Ave.
*Poon, Yan Kwong,	Canton, China,	13 N D
Pope, Edward Stickney,	Chicago, Ill.,	169 C'y
Posey, Howard Lanyon,	So. Orange, N. J.,	91 H
Potter, Robert Gordnier,	Coudersport, Pa.,	17 E W
Prime, Edward Gardner,	Yonkers, N. Y.,	282 C'y
Pritchard, LeRoy William,	Ithaca, N. Y.,	103 P
Pyle, Gordon McAlpin,	Morristown, N. J.,	12 E W
Rae, John,	Pittsburgh, Pa.,	42 B
*Rankin, James Brownlee,	New York, N. Y.,	41 L
Reay, Neville William, Jr.,	St. Paul, Minn.,	63 H
Rickert, Van Dusen, Jr.,	Pottsville, Pa.,	262 C'y
Ridenour, Peter Davenport,	Kansas City, Mo.,	8 U P
Ridgeway, George Loveland,	Wappingers Falls, N. Y.,	25 N E
Robbins, Edward Coles,	Haverford, Pa.,	8 M D
Roberts, Ernest Edward, Jr.,	Key West, Fla.,	12 N E
*Roberts, Harlan Conklin,	Minneapolis, Minn.,	42 H
Roberts, William Culver,	Brooklyn, N. Y.,	11 '79 H
*Robertson, Forbes Ferebee,	Atlantic City, N. J.,	37 N E
Rodda, Kenneth Stryker,	Arlington, N. J.,	32 S E
Rogers, Millard Huntington,	Omaha, Nebr.,	143 H
*Romaine, Julian Girard,	New York, N. Y.,	11 A H
Rutherfurd, Douglas,	Newark, N. J.,	143 H
Safferstone, Emanuel,	Little Rock, Ark.,	47 Spring St.
Schelker, Walter Gaspard, Jr.,	Montclair, N. J.,	21 L
*Schenecker, Edmund Whitla,	Fort Worth, Texas,	103 P
*Schmertz, Louis Robinson, Jr.,	Jeannette, Pa.,	12 B
Schulz, Otto Frederick,	Chicago, Ill.,	22 L
Schwartz, Emil,	Newark, N. J.,	38 L
Scott, John William, Jr.,	Lexington, Ky.,	72 P
Scott, William Edrington,	Fort Worth, Texas,	Nassau Inn
Seidensticker, Alfred John,	Princeton, N. J.,	8 Hamilton Ave.
Sheldon, David Sutphen,	Bloomfield, N. J.,	8 S W
Sherman, Anthony Russell,	Newark, N. J.,	102 P

* Failed of promotion.

Sherwood, Sidney,	Cornwall, N. Y.,	61 '79 H
Slocum, Jameson Sadler,	Dayton, Ohio,	10 S W
*Smart, Thomas,	Detroit, Mich.,	201 H S
*Smedley, Martin Harvey,	Elmhurst, R. I.,	5 Hill
Soper, Leslie Bliss,	Jersey City, N. J.,	65 H
Sortor, Charles Raymond,	Princeton, N. J.,	21 Edwards Pl.
Spalding, William Franklin,	Denver, Colo.,	308 H'm
Sparks, William Baxter,	Terre Haute, Ind.,	132 L
Spence, John Emerson,	Princeton, N. J.,	15 Dickinson St.
Spencer, Theodore,	Haverford, Pa.,	73 H
Spottiswoode, George, II.,	Orange, N. J.,	14 A H
Sproul, John Wright,	Somerville, N. J.,	21 '79 H
Stauffer, Donald Alfred,	Denver, Colo.,	19 N E
*Steele, Hollius McKim,	Baltimore, Md.,	76 H
*Steimle, Douglas Bruning,	New York, N. Y.,	42 S E
*Stevens, Nathaniel,	Plainfield, N. J.,	Cap & Gown Club
Stinson, Robert,	Baltimore, Md.,	103 B
Strang, Stephen Bartow,	Denver, Colo.,	1 S D
Straut, Charles Barnwell,	New York, N. Y.,	41 '79 H
Stuhler, William Raymond, Jr.,	Monticello, Iowa,	183 L
Sylvester, Arthur, Jr.,	Montclair, N. J.,	122 L
Talmage, Frank DeWitt,	Brooklyn, N. Y.,	12 W W
Taylor, Harold Lawrence,	Brooklyn, N. Y.,	21 '79 H
Taylor, John Coard,	New York, N. Y.,	11 H'm
Taylor, William McCaw,	Norfolk, Va.,	161 L
Thielen, Benedict Prieth,	Newark, N. J.,	7 E M W
Thomas, James Frederick,	Johnstown, Pa.,	111 B
Thompson, Charles Rose,	Manhasset, L. I.,	12 H
Thompson, John Lewis, Jr.,	Houston, Texas,	44 B
Thomson, Chester Pinkerton,	Hackensack, N. J.,	222 C'y
Tobriner, Walter Nathan,	Washington, D. C.,	16 Edwards Pl.
Todd, Howard Greeley,	Melrose Highlands, Mass.,	26 M D
*Towers, Albert Garey, Jr.,	Baltimore, Md.,	88 P
Townsend, Gerard Bostwick, Jr.,	New York, N. Y.,	64 B
*Vahey, James Henry, Jr.,	Watertown, Mass.,	3 L P
van Buren, Francis Reid,	Annapolis, Md.,	25 L
Van Dyke, George Malcolm Ramsay,	Moosic, Pa.,	14 S M R
Veeder, Harold Gerit,	Schenectady, N. Y.,	8 L P
Vilsack, Kenneth Francis,	Pittsburgh, Pa.,	90 Nassau St.
Volkening, Henry Theodore,	New York, N. Y.,	13 P
Vossler, Perry,	Farmingdale, N. J.,	306 H'm
Wallace, John Moore,	Cincinnati, Ohio,	133 H
Wallace, Richard Hendrickson,	New Castle, Pa.,	34 B
*Walsh, Wiliam Sebastian,	Cincinnati, Ohio,	81 B
Wangler, Robert McCreery,	Flushing, N. Y.,	141 H
Waterworth, Harold Alexander,	New York, N. Y.,	42 L
Webster, Chauncey Wilson,	St. Louis, Mo.,	8 S W
Weekes, Hobart Godfrey,	New York, N. Y.,	52 B
*Welch, Paul Eugene,	Mount Union, Pa.,	112 H
*Wells, Oscar,	Platte City, Mo.,	72 H
Westerfield, John Rogers,	Montclair, N. J.,	111 L

* Failed of promotion.

White, Cleveland Stuart,	New York, N. Y.,	33 B
White, William Chapman,	Reading, Pa.,	9 S W B
*Wiegand, William Green,	New Orleans, La.,	132 L
Williams, John Edgar, Jr.,	Atlantic City, N. J.,	9 A H
Winkler, Robert Eli,	New York, N. Y.,	133 H
Woodbridge, Charles Jahleel,	Shanghai, China,	2 E M W
Woolley, Paul,	Newton Centre, Mass.,	6 S M R

A.B. Juniors 272

CANDIDATES FOR THE DEGREE OF B.S.

Aaronson, Robert Howard, Jr.,	Bordentown, N. J.,	5 E B
Allen, John Hall,	St. Paul, Minn.,	Ivy Club
Anderson, Herbert Edgar, Jr.,	Pittsburgh, Pa.,	122 L
*Bachman, John Tedford,	Sharon, Pa.,	24 P
Bailey, Boyd Langdon,	Lexington, Ky.,	1 M D
*Bailey, Francis Trowbridge,	New York, N. Y.,	100 P
Baker, Harland Felch,	Concord, N. H.,	Cottage Club
Baldwin, Julian Townsend,	West Chester, Pa.,	17 W W
Barkhorn, Charles Webner,	Newark, N. J.,	11 W B
*Barnett, Nisbett Arthur,	Memphis, Tenn.,	332 C'y
*Beattie, Patrick Carlisle,	Arlington, N. J.,	321 C'y
Beatty, John Townsend,	Highland Park, Ill.,	121 L
Bergen, Lloyd Moss,	Milwaukee, Wis.,	1 S E
*Blake, Judson Abbott,	New York, N. Y.,	82 P
Blanton, Thomas Lindsay, Jr.,	Abilene, Texas,	6 A C
Bowman, Arthur Donald,	Short Beach, Conn.,	9 L P
Bradley, Sydney Klock,	Glen Ridge, N. J.,	134 H
Bradley, Udolpho Theodore,	Frankfort, Ky.,	90 Nassau St.
Brewster, Warren Dwight,	New York, N. Y.,	16 C
Broadhead, Elbert Howe, Jr.,	Parkesburg, Pa.,	46 Wiggins St.
*Brooks, Alfred Emmons,	Ilion, N. Y.,	10 Dickinson St.
Brown, Edward Woodman,	Asbury Park, N. J.,	82 P
Broyles, Norris Arnold,	Atlanta, Ga.,	52 '79 H
*Burke, Franklyn, Emmett, Jr.,	Forest Hills, L. I.,	66 L
Callanan, James Reid, So.	Bethlehem, N. Y.,	55 Jefferson Rd.
Chace, Jonathan,	Providence, R. I.,	11 '79 H
Chorlian, Gregory Moore,	Alexandria, Egypt,	9 S W B
Cleaves, John Bowman,	Oil City, Pa.,	Elm Club
Conner, E. Harold,	Augusta, Ark.,	138 Nassau St.
Cook, Herbert Edward,	Arlington, N. J.,	Dial Lodge
Cooper, Melbourne John,	Waco, Texas,	123 L
Cordes, Victor Adolph, Jr.,	Memphis, Tenn.,	Cannon Club
Cuningham, Edward Pusey,	Media, Pa.,	3 S E
*Dahlgren, Ulric, Jr.,	Princeton, N. J.,	7 Evelyn Pl.
Davis, Wilmer Fell,	Federalsburg, Md.,	8 N W
*Dixon, George Robert,	Moore, Pa.,	1 E M W
Donahue, Thomas Harbison, Jr.,	Inspiration, Ariz.,	9 A H
Donald, Gordon Duthie,	Brookline, Mass.,	3 S E B
Dulley, Leslie Beitler,	Monrovia, Calif.,	61 '79 H
Duncan, Joseph Eugene,	Lykens, Pa.,	7 N W

* Failed of promotion.

Dunlop, Alexander McCook,	Washington, D. C.,	73 B
*Eberhart, Robert Friend,	Memphis, Tenn.,	163 L
*Euwer, Paul,	Jeannette, Pa.,	111 L
*Fisher, Alexander Murray,	Eccleston, Md.,	13 '79 H
Fisher, George Gordon,	New York, N. Y.,	64 B
Fleming, William Thomas,	Philadelphia, Pa.,	15 C
Foster, Gerald S.,	Westfield, N. J.,	7 E M W
Fox, Frank	Glen Ridge, N. J.,	321 C'y
Frame, William Henry, Jr.,	Peekskill, N. Y.,	61 B
Fyles, Cyril Emerson,	Flushing, N. Y.,	34 B
Gaines, Theophilus Stockton,	Washington, D. C.,	132 H
Gale, Robert,	Schenectady, N. Y.,	5 E W
Goodbody, Robert,	Paterson, N. J.,	S W W
*Gorman, John Paul,	Syracuse, N. Y.,	10 L P
Gray, Howard Kramer,	Omaha, Nebr.,	85 P
Gresh, Perry Heim,	Norristown, Pa.,	34 C
Griffin, Donald Worner,	Lock Haven, Pa.,	5 S W B
Harrison, Stuart Eads,	St. Louis, Mo.,	S B H
*Haupt, Howard Cameron,	New York, N. Y.,	62 '79 H
Havell, George Frederic,	Newark, N. J.,	85 P
Henry, William Llewellyn,	Carnegie, Pa.,	31 P
Herrlich, William Everett,	New York, N. Y.,	15 E W
Hoffman, William Gilmor, III,	Baltimore, Md.,	73 P
Hopkins, William Cabell,	Atlanta, Ga.,	11 S W
Huhn, Tevis,	Philadelphia, Pa.,	S L P
*Hungerford, Leslie Phillips,	Greenville, S. C.,	112 H
Imhoff, Robert Ernst,	Hammonton, N. J.,	18 S W
Jaeger, George Joseph, Jr.,	Chicago, Ill.,	42 B
*Jennings, Cortez Myers,	Towanda, Pa.,	4 E W
*Johnson, John Wesley,	Plainfield, N. J.,	23 Williams St.
*Johnston, Gale,	St. Louis, Mo.,	51 '79 H
Jones, Robert Chesson,	Mountain Lakes, N. J.,	343 C'y
Jordan, Robert Hardin,	Memphis, Tenn.,	23 '79 H
*Kavanagh, James Orville,	Mt. Vernon, N. Y.,	51 '79 H
Keech, George Gilbert Williams,	New York, N. Y.,	32 C
Kelly, Dixon Seaver,	Kansas City, Mo.,	33 First Nat. Bk.
Kemp, John Howard,	New York, N. Y.,	41 '79 H
Kennedy, Moorhead Cowell, Jr.,	Philadelphia, Pa.,	251 C'y,
Kimball, Heathcote Mureson Hartt,	Garden City, N. Y.,	352 C'y
Koetter, Carl Eric,	Hoboken, N. J.,	34 Bank St.
Lamb, Dana Storrs,	New York, N. Y.,	8 Madison St.
Ledbetter, William Chase,	Murfreesboro, Tenn.,	12 C
*Lenon, Warren E.,	Little Rock, Ark.,	230 Nassau St.
Lewis, Harrison Rollins,	Orange, N. J.,	5 S D
Littlehales, George Reber,	Washington, D. C.,	52 L
Long, Louis Jonas, Jr.,	New York, N. Y.,	141 H
Luquer, Evelyn Pierrepont,	Mt. Kisco, N. Y.,	11 P
*McClain, Bruce,	Montclair, N. J.,	7 E M W
Macdonald, Godfrey,	Washington, D. C.,	221 C'y
McKenney, John,	Centreville, Md.,	73 P
MacKinney, John Reynand,	New York City,	13 L

* Failed of promotion.

McLean, Marvin McDugald,	Washington, D. C.,	2 W M W
Madden, Donald Burbank,	Antrim, N. H.,	4 N M R
*Marshall, John Ross,	Dumont, N. J.,	11 Dickinson St.
Marshall, Pendleton,	New York, N. Y.,	68 L
*Mayer, Hugo Engel,	Butte, Mont.,	110 Moore St.
Meriwether, James Hunter,	Kansas City, Mo.,	3 W M W
Miller, John Malcolm,	Elizabeth, N. J.,	162 L
Monroe, Stewart,	Cleveland, Ohio,	5 N R
Montgomery, Nelson Tanner,	Buffalo, N. Y.,	66 L
Moreland, George Boulton, Jr.,	Pittsburgh, Pa.,	251 C'y
Morrisson, Robert,	Chicago, Ill.,	72 B
*Moulton, John Howard, Jr.,	Hollywood, Calif.,	42 B
Mylod, John Francis,	Glen Ridge, N. J.,	7 S W
Nicholes, Robert Gilliland,	Atlanta, Ga.,	30 Bank St.
*Nyce, Norman Strong,	Lincoln, Nebr.,	121 L
*O'Meara, Donald Lawrence,	Torrington, Conn.,	7 S D
Owen, William Floyd,	Fairmont, Minn.,	311 H'm
Page, Henry, Jr.,	Cincinnati, Ohio,	43 B
*Page, Wheeler Holloway,	Paoli, Pa.,	71 H
Payne, Frank Norvell,	Harrisburg, Pa.,	54 '79 H
*Peeples, Lewis Munford,	Cartersville, Ga.,	62 H
Pettey, Joseph James,	Ontario, Can.,	14 N W
*Pierce, Jonathan Dorr,	Montclair, N. J.,	36 L
*Powers, William Stuart,	Englewood, N. J.,	62 H
Price, William Evans,	Glen Ridge, N. J.,	4 S M R
*Rawson, Edmund Grindal, Jr.,	Ardmore, Pa.,	25 S E
Read, Robert Otis,	Pawtucket, R. I.,	131 H
Robinson, Donald Edward,	Peconic, L. I.,	72 B
Rutan, Frank Elmer, Jr.,	Sewickley, Pa.,	7 U P
Savage, Frederick Adams, Jr.,	Baltimore, Md.,	52 C
Schimpff, Edward Cannon,	Allentown, Pa.,	13 W W
*Schusler, Carl Herbert,	Pittsburgh, Pa.,	13 N E
Schuster, Norman William,	Cleveland, Ohio,	123 L
Sherman, Clayton Carr,	Evanston, Ill.,	123 L
Sisler, William Tilton,	Akron, Ohio,	342 C'y
*Smith, Wiman Henry, Jr.,	Buffalo, N. Y.,	66 L
Snable, Myron Adams,	Basking Ridge, N. J.,	18 S W
*Stevenson, Allen Byron,	Beaver, Pa.,	30 P
Stewart, Sloan Giffin,	Atlantic City, N. J.,	121 H
*Summers, George Clyde,	Clendenin, W. Va.,	122 H
Summers, Okey Shirley,	Clendenin, W. Va.,	122 H
Thomas, Edward Trudeau,	Baltimore, Md.,	81 P
Tinker, George Frederick,	Nutley, N. J.,	5 E B
*Towle, William Joseph, Jr.,	St. Paul, Minn.,	9 E B
Turney, Cecil John,	Brooklyn, N. Y.,	1 E W
Unfried, Martin Charles,	Newark, N. J.,	11 W B
Van Vleck, Joseph, Jr.,	New York, N. Y.,	343 C'y
Voss, George Kunhardt,	Omaha, Nebr.,	24 '79 H
*Weishaar, August Reinhardt,	Williamsport, Pa.,	307 H'm
Westervelt, Alan Huntington,	Los Angeles, Calif.,	3 S E B
*Whitley, Maurice Graham,	Louisville, Ky.,	163 L

* Failed of promotion.

Wiggan, George Alfred,	Philadelphia, Pa.,	23 '79 H
Willcox, Edward Cooke,	Englewood, N. J.,	33 B
Williams, Palmer Francis Castiglione,	Chevy Chase, D. C.,	85 P
Williams, Robert Lancaster, Jr.,	Eccleston, Md.,	13 '79 H
Williams, Samuel Hamilton,	Flint, Mich.,	8 W B
Wilson, Alexander Logan,	Pittsburgh, Pa.,	3 W B
*Wilson, Edward Mellon,	hiladelphia, Pa.,	4 A C
Woodland, Henry Thompson,	Orange, N. J.,	142 H
Wright, John Story,	Philadelphia, Pa.,	81 P
Wyman, James Brown,	Omaha, Nebr.,	24 '79 H

B.S. Juniors 152

CANDIDATES FOR THE DEGREE OF C.E.

Baselt, Frederick Christian,	Chicago, Ill.,	1 E M W
Dittman, Kenneth Anton,	Yonkers, N. Y.,	1 B
*Fudge, Russell Gerard,	Elmira, N. Y.,	10 S D
Galimpin, Luciano,	Bohol, P. I.,	26 S E
Goodrich, Hunter,	Milwaukee, Wis.,	106 P
Gulick, John Halsey,	South Casco, Me.,	9 L P
Hobson, John Barnfather,	New Orleans, La.,	132 L
Jones, Jonathan Malcolm,	Philadelphia, Pa.,	17 Edwards Pl.
Lehnert, Diedrich Frederick,	Brooklyn, N. Y.,	6 E B
Manthai, Herman Albert,	Port Jervis, N. Y.,	12 S D
*Mitcham, Edward H.,	New York, N. Y.,	36 Hill
Mozier, Albert Williams,	East Orange, N J.,	11 A H
Patterson, Robert Thomas Leiper,	Merion, Pa.,	15 N E
Porter, Lawrence Tupper,	St. Catherines, Ont.,	53 '79 H
Richardson, William Parvis,	Dover, Del.,	5 L P
Taylor, Donald Frank,	Harrisburg, Pa.,	A E B
Turle, Walter Lovell,	Duluth, Minn.,	44 B
Wiberley, Richard Alden,	White Plains, N. Y.,	1 E M W
Wurts, Charles Stewart, Jr.,	Philadelphia, Pa.,	15 C

Engineering Juniors 19

SOPHOMORE CLASS, 1924

CANDIDATES FOR THE DEGREE OF A.B.

Abeel, Neilson,	Morristown, N. J.,	11 L P
Adams, Harry Edwin,	Stroudsburg, Pa.,	8 N E
Ahlborn, Hervey Dunlap,	Wilkes-Barre, Pa.,	172 Nassau St.
*Anderson, Thomas Smith,	Parkersburg, W. Va.,	101 L
Andrews, Edward Day,	Akron, Ohio,	12 B
Aronsohn, Arnold,	Paterson, N. J.,	53 Tulane St.
Baer, Howard Fiest,	Charleston, W. Va.,	33 S E
Bailey, Frederick Randolph, Jr.,	Elizabeth, N. J.,	23 M D
Bailey, Pearce, Jr.,	New York, N. Y.,	22 S E
Bakoulis, Demos Constantine,	Princeton, N. J.,	G C
Barbour, William Delamater,	Orange, N. J.,	1 W M W
Barclay, John, Jr.,	Greensburg, Pa.,	92 H

* Failed of promotion.

Barker, Harper Leslie,	Gloversville, N. Y.,	8 S M R
Bartow, Nevett Steele, Jr.,	New York, N. Y.,	1 Hill
Bathgate, Morgan Seymour,	Newark, N. J.,	3 E W
*Battin, Harry Edwin, Jr.,	Corning, N. Y.,	71 B
Bergh, Henry Wilkens,	New York, N. Y.,	11 Jefferson Rd.
Berry, Kenneth Winfield,	Pelham, N. Y.,	32 Mercer St.
Berry, Richard Sears,	New York, N. Y.,	53 H
Bilheimer, William Edward, Jr.,	St. Louis, Mo.,	38 Wiggins St.
Blake, Howard Carson,	Chicago, Ill.,	113 H
Blankarn, Marshall Pullen,	Nutley, N. J.,	22 '79 H
Bonner, Douglas Griswold,	Brooklyn, N. Y.,	6 Bank St.
Boyd, Crosby Noyes,	Greenwich, Conn.,	66 Nassau St.
Brawner, William Parmer Fuller,	New York, N. Y.,	63 C
Brewer, Charles Edwin, Jr.,	Newark, N. J.,	17 M D
Brown, Walter Nathaniel,	Plainfield, N. J.,	6 Bank St.
Bryon, Adelmer Rogers,	Ridgefield, Conn.,	33 L
Buell, Edward Root,	Rochester, N. Y.,	21 Chambers St.
Burke, Robert James,	Washington, D. C.,	6 Bank St.
Burnham, Gordon Webster, Jr.,	Waterbury, Conn.,	8 Hill
Campbell, Herbert Sumner,	New York, N. Y.,	25 Chambers St.
Capen, Charles Alfred, Jr.,	New York, N. Y.,	15 M D
Capps, Edward, Jr.,	Princeton, N. J.,	1 E B
*Chisholm, John Rogers,	New York, N. Y.,	22 B
Church, Alonzo, 2nd.,	Lynchburg, Va.,	17 S E
Clark, Charles Wesley, II,	Clarksdale, Miss.,	305 H'm
*Clarke, Oscar Taylor,	Baltimore, Md.,	30 P
Coleman, Robert Burns, Jr.,	Los Angeles, Calif.,	1 N D
Collins, Charles Pomeroy,	Cleveland, Ohio,	10 Dickinson St.
Correa, Edgardo Alvarez,	New York, N. Y.,	6 Bank St.
Cox, James Augustus,	Princeton, N. J.,	48 Maple St.
Crallé, Jefferson Ball,	Washington, D. C.,	2 Nassau St.
Crawford, John,	Philadelphia, Pa.,	15 S E
Cresswell, Donaldson,	Philadelphia, Pa.,	74 H
Crouse, Otto,	Brooklyn, N. Y.,	6 W B
Cuyler, Lewis Baker,	Princeton, N. J.,	9 E W
Davis, Courtenay Chirm,	Chicago, Ill.,	9 B
Davis, Ferdinand Hermann,	New York, N. Y.,	1 Hill
Decker, Francis Keil,	Bronx, N. Y.,	26 Hill
Derr, Thompson,	Wilkes-Barre, Pa.,	25 Edwards Pl.
Dery, Charles Frederick,	Catasauqua, Pa.,	36 Vandeventer Ave.
Dilks, Walter Howard, Jr.,	Philadelphia, Pa.,	90 Nassau St.
Duane, Howard,	Wilmington, Del.,	75 H
Duckworth, George Eckel,	Little York, N. J.,	12 N M R
*Duncan, Daniel Gensemer,	Salt Lake City, Utah,	47 N. Tulane St.
Egbert, Donald Drew,	Flushing, N. Y.,	1 L P
Elbow, Charles William, Jr.,	Paterson, N. J.,	2 W W
Emeny, Brooks,	Salem, Ohio,	6 S D
Ewing, John Kennedy, 3rd.,	Bryn Mawr, Pa.,	11 H
Ewing, Rhea McCurdy,	Bronxville, N. Y.,	12 N M R
Faeth, Perry Edward,	Kansas City, Mo.,	9 B
Fearing, Lamar Munroe,	Highland Park, Ill.,	6 Bank St.

* Failed of promotion.

Fentress, Thomas Lyon,	Chicago, Ill.,	10 Dickinson, St.
*Fike, Paul Everett Coffman,	Confluence, Pa.,	4 N R
*Firestone, Russell Allen,	Akron, Ohio,	183 L
Fischler, Herbert Abraham,	New Brunswick, N. J.,	38 L
Forman, John Newton,	Flushing, N. Y.,	11 L P
Fosbroke, Hugbell Edgar Woodal, Jr.,	New York, N. Y.,	75 H
Fox, John Victor, Jr.,	Chicago, Ill.,	4 A C
Frelinghuysen, Frederick, Jr.,	Newark, N. J.,	75 H
French, Amos Tuck, Jr.,	Tuxedo Park, N. Y.,	173 Nassau St.
Fritts, Justin Everett,	Sag Harbor, L. I.,	18 L
Froelich, James David,	New York, N. Y.,	47 University Pl.
Fuller, John Archibald,	New York, N. Y.,	90 Nassau St.
Gailey, Robert Laurence,	Peking, China,	34 C
Gambee, Alanson Sumner,	New York, N. Y.,	41-51 P
Garrick, Herbert Frederick,	Yonkers, N. Y.,	2 C H'm
Gibbon, Samuel Young,	Philadelphia, Pa.,	43 '79 H
Gilmore, Lyman Gillan,	Auburn, Nebr.,	9 N R
*Glave, George Barrymore,	New York, N. Y.,	2 D H
*Gleason, John Austin,	Flushing, N. Y.,	1 L P
*Glore, Arthur Ridley,	New York, N. Y.,	19 Bank St.
Godolphin, Francis Richard Borroum,	Oak Park, Ill.,	C E B
Goodman, Benjamin, Jr.,	Memphis, Tenn.,	45 Hill
Goodwin, Homer Stanley,	New York, N. Y.,	11 S W B
Goodwin, Lawrence Merry,	Kansas City, Mo.,	144 C'y
Gordon, John Wyatt,	St. Louis, Mo.,	38 Wiggins St.
Graham, Boyd Billingslea,	Baltimore, Md.,	103 H
Grauer, Franklin Hayward,	New York, N. Y.,	4 S W B
Graves, Cothran Calhoun,	Washington, D. C.,	12 H'm
Green, Thomas Myer, Jr.,	Seattle, Wash.,	124 H
Gregory, Frank Marvin,	Red Bank, N. J.,	199 Nassau St.
Grosset, Alexander Donald,	Riverside, Conn.,	2 U P
Guthrie, Henry Blandy, Jr.,	New York, N. Y.,	2 B C
Halsey, Edwin Packard,	New Orleans, La.,	21 Chambers St.
Hamilton, Roger Paul,	Baltimore, Md.,	71 B
Hansen, Magnus Christian,	Vejle, Denmark,	8 N M R
Hatfield, James Spear,	Philadelphia, Pa.,	90 Nassau St.
Haven, Malcolm Dexter,	Brookline, Mass.,	21 Chambers St.
Hawkins, Ward Marshall,	Sullivan, Ind.,	28 Vandeventer Ave.
Hayes, William Christopher, Jr.,	New York, N. Y.,	42 C
Held, John Seys Huyler,	Atlantic City, N. J.,	61 H
Hemphill, Harry James,	Atlantic City, N. J.,	34 Vandeventer Ave.
Hencken, Hugh O'Neill,	Greenwich, Conn.,	35 University Pl.
Hodges, Henry Lee,	Sound Beach, Conn.,	34 L
Hogue, Bernard James,	Philadelphia, Pa.,	17 S W
*Holm-Smith, Alden,	Brookline, Mass.,	21 Chambers St.
Howard, John Eager,	Baltimore, Md.,	43 H
Hubbell, William Bradford,	New York, N. Y.,	6 N W
Humphreys, David,	New Canaan, Conn.,	4 Hill
Innes, Brainerd Munro,	Davenport, Iowa,	8 B H'm
Jackson, Charles Douglas,	New York, N. Y.,	35 University Pl.
Jackson, William Harding,	Hempstead, L. I.,	11 C

* Failed of promotion.

James, Darwin Rush, III.,	New York, N. Y.,	90 Nassau St.
James, Wynne, Jr.,	Doylestown, Pa.,	3 B
Johns, John,	New York, N. Y.,	6 Bank St.
Jones, Robert Howard,	Pittsburgh, Pa.,	172 Nassau St.
Karr, Edward Rudd,	Hastings-On-Hudson, N. Y.,	2 Nassau St.
Keech, Joseph Gibbons,	Swarthmore, Pa.,	13 M D
Keeney, Roger Butterfield,	Grand Rapids, Mich.,	54 L
Keith, Sidney,	Philadelphia, Pa.,	32 H
Kelly, George Armstrong,	Pittsburgh, Pa.,	305 H'm
Kendall, David Walbridge,	Jackson, Mich.,	1 C H'm
Kennedy, George Howe,	Philadelphia, Pa.,	3 E B
Kimball, Herbert Hayward,	Davenport, Iowa,	38 Wiggins St.
Kinney, Frederick Cleveland,	Evanston, Ill.,	13 Bank St.
Kirkland, Henry Bingham,	Brooklyn, N. Y.,	9 N W
Kirkpatrick, Thomas,	New York, N. Y.,	13 A H
Klaess, John Joseph,	Rockville Centre, L. I.,	40 Vandeventer Ave.
*Kunkel, Lewis Sterling,	Harrisburg, Pa.,	66 Nassau St.
Lacey, George Henry Patterson,	Nashville, Tenn.,	90 Nassau St.
Laidlaw, Robert Wordsworth,	New York, N. Y.,	6 N W
Latta, Cuthbert Hope, Jr.,	Greensburg, Pa.,	42 L
Latta, John,	Greensburg, Pa.,	42 L
Leeming, Leonard Busby,	Brooklyn, N. Y.,	82 B
Leh, George Edward,	Allentown, Pa.,	41-51 P
Leitch, Alexander,	Jersey City, N. J.,	10 N M R
Lester, Harlow Baker,	Kansas City, Mo.,	2 L P
Liebman, Henry,	New York, N. Y.,	56 C
Lionberger, Arthur David,	St. Louis, Mo.,	10 E W
Lipscomb, Louis Willoughby,	San Antonio, Texas,	111 L
Little, Stephen Knox,	New York, N. Y.,	182 L
Lloyd-Smith, Parker,	New York, N. Y.,	42 C
Long, Robert Sigmund,	New York, N. Y.,	20 M D
*Long, Sidney,	Orofine, Idaho,	3 W B
Lubin, Theodore,	Pittsburgh, Pa.,	4 S E
McCarthy, Edward,	Plainfield, N. J.,	12 Chambers St.
McCloskey, John Joseph, Jr.,	Princeton, N. J.,	27 William St.
McDermand, Frank Roberts, Jr.,	Kansas City, Mo.,	8 Hill
Macdonald, Allan Houston,	North Andover, Mass.,	10 Dickinson St.
MacWilliam, James Donald,	Kingston, Pa.,	16 Park Place
Manchee, Frederick Bowen,	Newark, N. J.,	31 C
Martin, Thomas Wilson, III.,	Wilkinsburg, Pa.,	46 Wiggins St.
Mago, Joseph Graham,	Rochester, Minn.,	14 '79 H
Melady, Ralph Laits,	Watertown, N. Y.,	29 S E
Melcher, Russell Englis,	Englewood, N. J.,	2 U P
Merrill, John Lenord,	East Orange, N. J.,	2 B H'm
Michael, Oscar,	South Orange, N. J.,	35 Hill
Miles, John Blanchard, Jr.,	Norfolk, Va.,	81 H
Miller, Milo George, Jr.,	Atlantic City, N. J.,	21 Chambers St.
Mishima, Michitaka,	New York, N. Y.,	9 W
Mitchell, William Hamlin,	Buffalo, N. Y.,	144 L
Mohle, Frederic Bailey,	Brooklyn, N. Y.,	39 University Pl.
Molloy, John Gerard Louis,	Bayonne, N. J.,	E E B

* Failed of promotion.

Mordecai, Allan Lewis,	New York, N. Y.,	71 L
Morehouse, Richard Andrew,	Columbus, Ohio,	7 W M W
Moreland, Carroll Collier,	Pittsburgh, Pa.,	8 E B
Moser, Coleman Clarkson,	New York, N. Y.,	6 Bank St.
Moser, Karl,	New York, N. Y.,	6 Bank St.
Murkland, Harry B.,	Orange, N. J.,	10 S W B
Muse, Albert Banks,	Ben Avon, Pa.,	7 W M W
Nathan, Horace Leonard,	New York, N. Y.,	11 S E
Naumburg, Edward, Jr.,	New York, N. Y.,	2 Nassau St.
Nelson, Benjamin Hirsch,	Binghamton, N. Y.,	38 Wiggins St.
Oliphant, Robert Thompson,	Trenton, N. J.,	2 Nassau St.
Osborne, Frederick Spring,	Newark, N. J.,	164 L
Owen, Honore Martyn, Jr.,	Decatur, Ill.,	6 S D
Palmer, George Gilbert,	Orange, N. J.,	2 B H'm
Parker, Clarence LeRoy, Jr.,	Washington, D. C.,	16 Park Place
Parker, Warren Innis,	Oil City, Pa.,	15 L P
Paschal, Howard Stanley,	New York, N. Y.,	90 Nassau St.
Pearce, Arthur Raymond,	Erie, Pa.,	9 N E
Pell, Walden, 2nd,	New York, N. Y.,	11 C
Pickering, Russell Cravens,	Kansas City, Mo.,	10 P
Pirie, John Thomas, 2nd.,	New York, N. Y.,	23 S E
Pole, Henry Stier, II.,	Hot Springs, Va.,	6 Bank St.
Pollins, Abram Harvey, Jr.,	South West, Pa.,	42 Wiggins St.
Pottenger, Robert Thomas,	Monrovia, Calif.,	172 Nassau St.
Potter, Herbert Ross,	Kingston, Pa.,	44 Vandeventer Ave.
Prewitt, Allen,	Mt. Sterling, Ky.,	51 B
Pruden, William Deane,	Summit, N. J.,	23 M D
Quayle, William Hamilton,	Oswego, Ill.,	38 S E
Raymond, Olney Martin,	Brooklyn, N. Y.,	11 N M R
Reakirt, Charles Coleman, Jr.,	Cincinnati, Ohio,	4 A C
Reiber, Marten Albert,	Butler, Pa.,	15 L P
Reidemeister, William Werner,	Englewood, N. J.,	2 U P
Richards, Willis Bell, Jr.,	New York, N. Y.,	51 B
Roberts, Brinton Page,	Philadelphia, Pa.,	32 H
Roberts, Charles William, Jr.,	Nyack, N. Y.,	53 Tulane St.
Samuels, Norvell Brockman,	East Orange, N. J.,	10 P
Schlaitzer, Charles William, Jr.,	Brooklyn, N. Y.,	12 W W
Schmalz, Alfred George Henry,	Weehawken, N. J.,	35 University Pl.
Schwed, Frederick, Jr.,	Far Rockaway, L. I.,	16 Edwards Pl.
Selden, John Earp,	Oil City, Pa.,	4 M D
Sellers, Mark Ashley,	Atlanta, Ga.,	4 N R
Sexton, Eric Hyde Lord,	Philadelphia, Pa.,	15 L
Shannon, Austin John,	Columbus, Ohio,	12½ Vandeventer Ave.
Shaw, Roger,	Hastings-On-Hudson, N. Y.,	90 Nassau St.
Shoemaker, William Hutchinson,	Norristown, Pa.,	9 N W
Silz, Lucien James,	New York, N. Y.,	32 Mercer St.
Smith, Emmons Stockwell, Jr.,	Washington, D. C.,	52 L
Smith, Wallace Herndon,	St. Louis, Mo.,	54 L
Springmeyer, Henry Edward,	Hoboken, N. J.,	35 University Pl.
Stanclift, Frederick Charles,	New Hartford, Conn.,	66 Nassau St.
Starr, Lewis Abbott,	Camden, N. J.,	82 H
Steese, Edward,	New York, N. Y.,	10 Bank St.
Stephens, John Underwood,	Pittsfield, Mass.,	118 H

Sterrett, Walter Edmund,	New York, N. Y.,	90 Nassau St.
Stockton, Robert Cobb,	Evanston, Ill.,	13 Bank St.
Studdiford, Andrew Douglass,	New York, N. Y.,	90 Nassau St.
Stump, John Bartram,	Emmorton, Md.,	462 C'y
Sutphen, Henry Randolph, Jr.,	New York, N. Y.,	2 B C
Swain, Don Day,	Aberdeen, S. Dak.,	14 N E
Talmage, Prentice,	New York, N. Y.,	182 L
Taylor, Foxhall Parker Keene,	New York, N. Y.,	123 H
Taylor, James Spencer,	Newburgh, N. Y.,	7 B H
Ten Eyck, Barent Muller,	New York, N. Y.,	S E B
Tompkins, Ellsworth Everett,	Paterson, N. J.,	85 S E
Townsend, Charles Cooper,	Philadelphia, Pa.,	123 H
Trimble, David Churchman,	Baltimore, Md.,	81 H
Twitchell, Herbert Kenaston, Jr.,	Brooklyn, N. Y.,	6 Bank St.
Tyson, Hugh Lawrence,	Princeton, N. J.,	33 N E
Van Houten, Norman Baldwin,	Newark, N. J.,	442 C'y
Wall, Albert Carey,	West Orange, N. J.,	21 Chambers St.
Wegge, Wallace,	Greenwich, Conn.,	46 Wiggins St.
Weingarten, Robert Lee,	Newark, N. J.,	35 Hill
Weiser, Horace Spengler,	Decorah, Iowa,	101 L
Wever, George DeWolf,	New York, N. Y.,	142 L
Wheelock, Wendell Kurtz,	Cleveland, Ohio,	7 Witherspoon St.
Wheelwright, Clarence Watson,	Baltimore, Md.,	10 A H
Willett, Edward Francis,	Washington, D. C.,	10 S R
Williams, Douglas McLean,	New York, N. Y.,	11 S W B
Williams, Howard,	St. Louis, Mo.,	4 S E B
Williams, John Stanton,	New York, N. Y.,	8 A H
Windisch, Frederick Charles,	Cincinnati, Ohio,	24 Madison St.
Wormser, Morton,	New York, N. Y.,	16 W W
Wylie, Phillip Gordon,	Montclair, N. J.,	21 Hill
Yandell, Lunsford Pitts, Jr.,	Greenwich, Conn.,	21 H'm
Yerger, Maxwell,	Mound, La.,	42 Hill

A.B. Sophomores 250

CANDIDATES FOR THE DEGREE OF B.S.

*Adam, John Livingston,	Summit, N. J.,	90 Nassau St.
Adams, Washington Irving Lincoln, Jr.,	New York, N. Y.,	U P
Alexander, DeForest Manice,	New York, N. Y.,	14 C
Alyea, Hubert Newcombe,	Montclair, N. J.,	16 N E
Angell, Irving Jackson,	Springfield, Mass.,	3 S W B
Angell, Theodore Fisher,	Springfield, Mass.,	3 S W B
Austin, Charles Lee,	Port Chester, N. Y.,	8 C H
Baily, Charles Frederick,	Strafford, Pa.,	102 H
Baird, Matthew, III.,	Philadelphia, Pa.,	14 C
Bancroft, Thomas Moore,	Sandy Spring, Md.,	21 Chambers St.
Barnhart, Arthur Middleton,	Chicago, Ill.,	194 Nassau St.
Barnsley, John Herman, Jr.,	Newtown, Pa.,	2 B H
Barr, George Bishop,	Cynwyd, Pa.,	212 C'y
Barr, William Allen, Jr.,	Wayne, Pa.,	14 B
Barringer, John Paul,	Philadelphia, Pa.,	102 H
Bartlett, Edwin Alonzo,	North Oxford, Mass.,	142 L

* Failed of promotion.

Barton, Frank Gustavus, Jr.,	Memphis, Tenn.,	113 B
Barton, Walter Albert,	Boise, Idaho,	172 L
Bates, Marcus Cornell,	Chicago, Ill.,	15 S W
*Baugh, Daniel, III.,	Baltimore, Md.,	13 A H
Beach, Daniel Magee, Jr.,	Rochester, N. Y.,	2 D H
Beebe, Richard Townsend, Gt.	Barrington, Mass.,	32 Vandeventer Ave.
Benedict, Samuel,	Sewanee, Tenn.,	53 H
Berwind, Henry Augustus, Jr.,	Philadelphia, Pa.,	11 Alexander St.
Blair, William Draper,	Silver Spring, Md.,	43 H
Bostwick, William Arthur, Jr.,	Bronxville, N. Y.,	90 Nassau St.
Bradbury, Henry William,	Kingston, Pa.,	16 Park Pl.
Brady, Clarence Simpson,	Scranton, Pa.,	54 H
Brumder, William George,	Milwaukee, Wis.,	90 Nassau St.
Carter, Herbert Pratt,	Huntington, L. I.,	34 N E
Chace, William Emerson,	Buffalo, N. Y.,	85 University Pl.
Chase, Carl Trueblood,	Portland, Me.,	122 Moore St.
Chisholm, Donald Muhlenberg,	Morristown, N. J.,	8 A H
Comey, Frank Aubrey,	Milwaukee, Wis.,	14 '79 H
Conger, Stephen Crawford,	New York, N. Y.,	15 N D
Crabbe, Edward Luis.	Toms River, N. J.,	32 Vandeventer Ave.
Cutting, James Russell,	Montclair, N. J.,	172 Nassau St.
Darby, Jordan Branch,	Hagerstown, Md.,	9 E M W
Davis, Henry Gassaway, III.,	Elkins, W. Va.,	85 University Pl.
Dawes, Daniel Cooke,	Englewood, N. J.,	2 Nassau St.
Dean, William Henry, Jr.,	Montvale, N. J.,	92 B
*De La Cour, Joseph Carl, Jr.,	Riverton, N. J.,	90 Nassau St.
Dix, Tennille,	South Orange, N. J.,	8 Madison St.
Dixon, William Tucker,	Princeton, N. J.,	6 M D
Doelger, William Ebling Peter,	New York, N. Y.,	331 C'y
Donnelly, John Edward, Jr.,	Hastings-On-Hudson, N. Y.,	5 Hill
Dulles, William Winslow,	Princeton, N. J.,	30 N E
Duneka, Harvey Jefferds,	New York, N. Y.,	186 L
Dunne, Gerald Anthony,	Brooklyn, N. Y.,	14 U P
Dunnell, Jacob,	Boston, Mass.,	2 D H
Eastmond, Harold Charles,	Summit, N. J.,	37 S E
Eisenbrey, John Kenton,	Villa Nova, Pa.,	11 H
Ellis, Matthew James Mackinnon,	Swarthmore, Pa.,	31 '79 H
Ellis, Roger Sheffield,	Buffalo, N. Y.,	9 S E B
Emery, Harvey Charles,	Hoboken, N. J.,	171 L
Erdman, Frederick Seward,	Zahleh, Syria,	6 S R
Everett, Martin Ryerson, Jr.,	East Orange, N. J.,	5 S R
Fairchild, Louis Waldo,	Glen Ridge, N. J.,	90 Nassau St.
Farish, William Walter, Jr.,	Montclair, N. J.,	26 Hill
Fischer, Carl Castle,	Philadelphia, Pa.,	18 E W
Fitler, William Wonderly, Jr.,	Philadelphia, Pa.,	90 Nassau St.
*Flowers, Joseph Paul,	Joliet, Ill.,	115 B
Foster, Murray,	Washington, D. C.,	32 H
Foth, Fred Eaton,	New York, N. Y.,	31 S E
Fox, Gilbert Franklin,	East Orange, N. J.,	10 W B
Fullerton, George Jackson, Jr.,	Minneapolis, Minn.,	42 H
Garey, Robert Howes,	New York, N. Y.,	1 D H'm

* Failed of promotion.

Gaver, John Milton,	Baltimore, Md.,	36 L
Gooch, Harry Whittemore,	Sioux City, Iowa,	6 S E B
Graeser, Adam Otis,	Cincinnati, Ohio,	24 Madison St.
Grange, Herman Kremer,	Philadelphia, Pa.,	30 S E
Grant, John William, Jr.,	Atlanta, Ga.,	72 H
Hessberg, Edward Korn,	New York, N. Y.,	21 Edwards Pl.
Hilliard, James Byron,	Louisville, Ky.,	51 H
Hitzrot, Henry William,	Brookline, Mass.,	41-51 P
Hobbs, Richard Hutchinson,	New York, N. Y.,	32 Mercer St.
Hollenberg, Henry George,	Little Rock, Ark.,	421 C'y
Hopkinson, John Norman,	New York, N. Y.,	2 A H
Jacob, Herbert Allen,	New York, N. Y.,	24 Hill
Jacobsen, Owen Pardee,	Chicago, Ill.,	124 L
Johnson, William McEwen, Jr.,	Washington, D. C.,	90 Nassau St.
Joyce, Morton Dean,	Beverly Hills, Cal.,	54 L
Juhring, John Christopher, Jr.,	New York, N. Y.,	35 University Pl.
Kahlo, George Dwight,	White Sulphur Springs, W. Va.,	21 Cham. St.
*Kerney, Thomas Lincoln,	Trenton, N. J.,	41 C
Ketchum, Sherman Phelps,	Newark, N. J.,	16 L P
Klumpp, Theodore George,	New York, N. Y.,	11 N M R
Koven, Wilhelm Pauli,	Weehawken, N. J.,	34 Hill
Kydd, David Mitchell,	New York, N. Y.,	15 N W
Lamar, Norman Douglas,	Sioux City, Iowa,	6 S E B
Lanier, Sidney,	New York, N. Y.,	21 H'm
Lee, Charles Edgar,	Glen Cove, N. Y.,	8 Hill
Lewis, Robert Graham,	New York, N. Y.,	68 L
Lewis, Robert Wilson, Jr.,	Washington, D. C.,	142 C'y
Liebes, Sidney, Jr.,	New York, N. Y.,	11 N E
*Lindabury, Arthur Harrison,	Morris Plains, N. J.,	22 N E
Loeb, Arthur Ferdinand,	Atlantic City, N. J.,	12½ Vandeventer Ave.
McCaddon, Stanley Gage,	New York, N. Y.,	352 C'y
McClenahan, Robert Wallace,	Cairo, Egypt,	8 C H
MacDonald, James Flynn,	Charleston, W. Va.,	36 L
*McEldowney, William McConway,	Pittsburgh, Pa.,	90 Nassau St.
McGrann, Bernard Penn-Gaskell,	Princeton, N. J.,	212 C'y
McKelvy, Alfred Douglas,	Atchison, Kan.,	25 P
McKim, Clarence Raymond,	Newark, N. J.,	11 M D
Macomber, Sherwood Greer,	Brooklyn, N. Y.,	12 N E
*Malcolm, Theodore Henry, Jr.,	New York, N. Y.,	173 Nassau St.
Marburg, Francis Grainger,	Baltimore, Md.,	4 U P
*Mathey, Cecil Fabyan,	Cranford, N. J.,	9 E M W
Meade, John,	Wilmington, Del.,	22 B
Meirs, Jarvis,	Philadelphia, Pa.,	105 P
Meston, Alexander William,	New York, N. Y.,	2 S E
*Millard, William Macfarlane,	New London, Conn.,	10 S W
Miller, John Marshall,	Atlanta, Ga.,	2 A H'm
Monroe, William,	Cleveland, Ohio,	5 N R
Montgomery, John Seymour, Jr.,	New York, N. Y.,	9 W M W
Munroe, Paul,	Elizabethtown, N. Y.,	36 Hill
Murrie, William Malcolm,	Hershey, Pa.,	41 C
Newby, Richard Ardell,	Washington, D. C.,	Thomson Hall
Nicholson, Lawrence Arnold,	Wynnewood, Pa.,	15 N D

* Failed of promotion.

*Parke, Arthur Thomas, Jr.,	West Chester, Pa.,	3 A H
Parke, William Ernest, II.,	West Chester, Pa.,	3 A H
Patt, Herbert Bernardin,	Kansas City, Mo.,	18 L
*Payne, Frederick Blake,	New York, N. Y.,	23 C
Peyton, George Stevens,	Dallas, Texas,	113 B
Plauth, William Henry,	Amityville, N. Y.,	6 W B
Powell, Joseph Wright, Jr.,	Quincy, Mass.,	124 L
Putnam, Carleton,	New York, N. Y.,	10 Bank St.
Raymond, Ridenour,	Kansas City, Mo.,	164 L
Reynolds, Arthur Ellsworth,	Scranton, Pa.,	54 H
Richardson, Frank Elmer, Jr.,	Sewickley, Pa.,	92 H
Root, Waldo,	New York, N. Y.,	15 Univ. Pl.
Sadler, Houston McIntosh,	Brooklyn, N. Y.,	39 Univ. Pl.
Schaefer, Rudolph Jay, Jr.,	Larchmont Manor, N. Y.,	9 M D
Schullinger, Karl William,	New York, N. Y.,	61 H
*Scott, Clarence Joseph,	Chicago, Ill.,	Box 372
Sellers, William, 2nd.,	Philadelphia, Pa.,	71 H
Semans, Edwin Walker,	Uniontown, Pa.,	124 H
Semple, John Bonner, Jr.,	Sewickley, Pa.,	90 Nassau St.
Shafto, Ellsworth McElwee,	Passaic, N. J.,	16 Park Pl.
Shober, Edward Wharton,	Philadelphia, Pa.,	18 '79 H
Shrady, Raymond Hasbrouck,	New York, N. Y.,	142 L
Sieker, John Henry,	Hawthorne, N. J.,	28 N E
Simons, John Farr,	Philadelphia, Pa.,	300 H'm
Sisson, Edgar Grant, Jr.,	Montclair, N. J.,	21 Hill
Slack, Conover,	Trenton, N. J.,	11 Vandeventer Ave.
Smith, Isaac Noyes, Jr.,	Charleston, W. Va.,	82 H
Smith, Kenneth Baker,	New York, N. Y.,	6 Bank St.
Snively, Abraham Barr, Jr.,	Waynesboro, Pa.,	1 S E
Snyder, John Irwin,	Brooklyn, N. Y.,	6 E B
Spalding, Charles Daley, Jr.,	New Rochelle, N. Y.,	41 P
Spalding, John Craig,	New Rochelle, N. Y.,	41-51 P
Stabler, Winder Laird,	Wilmington, Del.,	32 Bank Bldg.
Stauffer, Donald DeRead,	Scottdale, Pa.,	2 A H
Strachan, Frank Duncan McPherson, Jr.,	New York, N. Y.,	74 H
Strauss, Julian Robert,	New York, N. Y.,	45 Hill
Strong, Harold Lovell,	Binghamton, N. Y.,	10 Nassau St.
Thompson, Donald Henry,	Youngstown, Ohio,	41 L
Turner, Herbert Glentworth, Jr.,	Princeton, N. J.,	23 Jefferson Rd.
van Gerbig, Howell,	New York, N. Y.,	90 Nassau St.
Voorhees, Brown Van,	New York, N. Y.,	66 Nassau St.
Wakem, Harold Dixon,	Chicago, Ill.,	9 S E B
Walker, William Charles,	Syracuse, N. Y.,	11 Dickinson St.
Wheeler, Gordon Bigelow,	Chicago, Ill.,	5 S W
Whitehead, Kirk,	Kansas City, Mo.,	9 B
Willett, Hurd Curtis,	Washington, D. C.,	10 S R
*Williams, William Didymus,	London, Ohio,	90 Nassau St.
Woollett, Joseph Nellegar, Jr.,	Chicago, Ill.,	8 E B
Woolston, Stephen Stockton,	Philadelphia, Pa.,	300 H'm
Wright, Robert Prentice,	New York, N. Y.,	6 Bank St.
Ziesing, Hibben,	Cleveland, Ohio,	124 H

B.S. Sophomores 170

* Failed of promotion.

CANDIDATES FOR THE DEGREE OF C.E.

Bensel, John Anderson, Jr.,	Bernardsville, N. J.,	30 Mercer St.
Bilyitch, Milenko S.,	New York, N. Y.,	S E
Flick, Justin Theobald,	Valley Stream, N. J.,	40 Vandeventer Ave.
Gilbert, Geoffrey,	Plainfield, N. J.,	13 Chambers St.
Greey, Edward Alexander,	Princeton, N. J.,	R. F. D. 3, Prin'n, N. J.
Kuser, Rudolph Victor, Jr.,	Trenton, N. J.,	263 Cy
Lee, William States, Jr.,	Charlotte, N. C.,	9 W M W
Margetts, Wilfred Caughey,	Arlington, N. J.,	10 N R
Newell, James Patton, Jr.,	Toledo, Ohio,	5 S R
Purvis, Edward Dunbar,	Brooklyn, N. Y.,	19 University Pl.
Rick, Edwin Marvin,	Brooklyn, N. Y.,	82 B
Roblin, John Hooper,	Watervliet, N. Y.,	10 N R
Thompson, George Everard,	Brooklyn, N. Y.,	1 W M W
Trowbridge, Conrad Ferman,	Princeton, N. J.,	15 University Pl.
Wadsworth, James Alfred,	Brooklyn, N. Y.,	1 W M W
Warren, Ira Stanley,	Princeton, N. J.,	12 Murray Place

Engineering Sophomores 16

FRESHMAN CLASS, 1925

CANDIDATES FOR THE DEGREE OF A.B.

Adams, Franklyn Scott,	Rochester, N. Y.,	8 N R
Adams, Samuel, Jr.,	Sewickley, Pa.,	72 L
Akahoshi, Rokuro,	New York, N. Y.,	24 C
Anderson, John Morrissey,	Bridgeport, Conn.,	8 Madison St.
Anderson, Robert Lovell,	Orange, N. J.,	18 W W
Arnold, John Kappeler,	Lincoln, Mass.,	47 N. Tulane St.
Atkinson, Archibald Parks,	Washington, D. C.,	11 Madison St.
Avery, Albert Gray,	New York, N. Y.,	20 W W
Ayer, Charles Morris,	New York, N. Y.,	12 P
Bain, Henry, III.,	Haverford, Pa.,	9 Madison St.
Baldwin, Theodore Washburn,	Lakewood, N. J.,	10 Bayard Lane
Ball, Frank Elliott,	Muncie, Ind.,	16 Stockton St.
Ballantine, Peter,	Newark, N. J.,	71 H
Bane, John Curry, Jr.,	Pittsburgh, Pa.,	12 Park Pl.
Barry, Arthur Joseph,	Peabody, Mass.,	11 Dickinson St.
Bell, Gilbert Elgin Orcutt, Jr.,	Pelham, N. Y.,	9 Madison St.
Bennett, Elbert Stone, Jr.,	Buffalo, N. Y.,	12 Chambers St.
Berkson, Ralph Julius Stanley,	Pelham Heights, N. Y.,	25 Cham. St.
Bernstein, Theodore,	Baltimore, Md.,	110 Nassau St.
Berry, Sidney Love,	Stamford, Conn.,	31 Univ. Pl.
Bethell, Frank Hartsuff,	Scarsdale, N. Y.,	15 Univ. Pl.
Billow, Elmer Ellsworth, Jr.,	Evanston, Ill.,	136 Nassau St.
Blodgett, Stuart Mills,	Newark, N. J.,	41 Park Pl.
Blow, Richard Allmand,	La Salle, Ill.,	22 Hill
Bope, James Augustus,	Findlay, Ohio,	15 Univ. Pl.
Bowring, Charles Warren, Jr.,	New York, N. Y.,	8 A H
Boyd, Frederic Eustis,	Waterbury, Conn.,	21 Chambers St.
Boyd, James Richardson,	Lawrenceville, N. J.,	42 Wiggins St.
Braman, Chester Alwyn, Jr.,	New York, N. Y.,	21 Chambers St.

Brauer, August, Jr., Nutley, N. J., 14 Edwards Pl.
Brent, Joseph Lancaster, Ruxton, Md., 62 B
Bright, Robert Douglas, Cape Cod, Mass., 20 E W
Bruere, John, Trenton, N. J., 1 S W B
Brunnow, Richard, Garrison-on-Hudson, N. Y., 24 M D
Brush, Murray Peabody, Jr., Port Deposit, Md., 161 C'y
Buddington, Weston Turner, Poquonock Bridge, Conn., 12 N D
Buechner, Thomas Sharman, New York, N. Y., 10 A H
Camp, Elisha, Atlantic Highlands, N. J., 5 M D
Carroll, Charles, Jr., Elivak P. O., Md., 24 Bank St.
Cary, Paul Van Etten, Jr., Appleton, Wis., 9 Madison St.
Chadbourne, Le Roy, New York, N Y., 21 Chambers St.
Cheston, Morris, Philadelphia, Pa., 41 H
Chiles, Alex Goodpaster, Mt. Sterling, Ky., 47 Univ. Pl.
Chiris, Leon Antoine, Montclair, N. J., 93 Alexander St.
Christen, Fred, New York, N. Y., 46 Park Pl.
Clark, Samuel Luther, Jr., Merion, Pa., 10 Bayard Lane
Clarke, James Rae, Jr., Yonkers, N. Y., 12 P
Cleveland, Francis Grover, Princeton, N. J., 300 H'm
Cochran, Williams, Plainfield, N. J., 1 A H'm
Cole, Frank William, Asbury Park, N. J., 164 Nassau St.
Coleman, John Ginon, New York, N. Y., 38 N E
Coles, Ernest Alan, New York, N. Y., 15 University Pl.
Colman, Walter Maguire, Rockford, Ill., 19 Madison St.
Cooper, Joseph Wilcox Jenkins, Baltimore, Md., 84 H
Corcoran, David Merle, Pawtucket, R. I., 11 W W
Coudert, Benjamin Tracy, New York, N. Y., 31 University Pl.
Cromwell, Seymour Legrand, Jr., New York, N. Y., 33 C
Cuff, John William, New York, N. Y., 39 Wiggins St.
Cumming, James Coale, Philadelphia, Pa., 60 B S
Cunningham, Robert Newton, Jr., LaMoure, N. Dak., 11 S E B
D'Arms, Edward Francis, Allentown, Pa., 11 S M R
Darrell, Edward Fairvairn, Jr., New York, N. Y., 31 University Pl.
Davis, Basil Hagy, New York, N. Y., 33 C
Davis, Edward Rezin, Clarksburg, W. Va., 28 Vandeventer Ave.
Dawes, Kenneth Janney, Hightstown, N. J., 5 Madison St.
Delehanty, Ambrose James, New York, N. Y., 2 Nassau St.
Depue, Robert Norris, Newark, N. J., 4 Madison St.
Dibrell, Frank Strong, Little Rock, Ark., 27 University Pl.
Dinsmore, Benjamin Braddock, Jr., Trenton, N. J., 30 Mercer St.
Dinsmore, Robert Braddock, Germantown, Pa., 14 N D
Doolan, John Merkle, New York, N. Y., 43 Vandeventer Ave.
Duffield, Dickinson Curtis, Newark, N. J., 62 C
Duncan, Robert Moore, Lake George, N. Y., 5 N E
Dunham, Robert James, Jr., Chicago, Ill., 31 University Pl.
Dwight, William, Holyoke, Mass., 31 University Pl.
Dyer, Walter Gurnee, New York, N. Y., 71 H
Dyson, John Milnes, Hazleton, Pa., 20 N E
Edgar, Ralph Caruth, Wilkinsburg, Pa., 32 Mercer St.
Ernst, Leonard Louis, New York, N. Y., 15 Madison, St.
Euston, Alexander, II., Scranton, Pa., 27 Jefferson Rd.
Fall, Joseph Horton, III., Evanston, Ill., 24 H'm

Farrell, Robin Williams, Jamaica, N. Y., 49 Wiggins St.
Ferguson, Robert Robertson, Paducah, Ky., 19 Bank St.
Ferris, Walter Rockwood, Jr., Syracuse, N. Y., 54 B
Fine, John Van Antwerp, Princeton, N. J., 4 E M W
Finnerty, Peter Kerin, Denver, Colo., 8 S W B
Fischer, William Howard, Plainfield, N. J., 16 Madison St.
Fisher, Galen Merriam, Jr., Mt. Vernon, N. Y., 15½ Chambers St.
Fitzgibbon, William Fulton, Newark, Ohio, 47 University Pl.
Flanagan, Nelson Adams, New York, N. Y., 15 Dickinson St.
Fleming, John Winters, Buffalo, N. Y., 47 University Pl.
Freeman, Arthur Leonard, Flint, Mich., 53 University Pl.
Fritz, Jule William, Greenville, Ill., 19 University Pl.
Fuellhart, William Clarke, Endeavor, Pa., 19 Edwards Pl.
Fuller, Verdi Edgar Brown, Jr., Brooklyn, N. Y., 29 Bank St.
Funk, Lyle William, New York, N. Y., 110 Nassau St.
Gale, Loring Robertson, New York, N. Y., 15 Dickinson St.
Gleason, Chauncey Rolland, Framingham, Mass., 311 H'm
Golden, Clement Harold, Irvington, N. J., B W B
Goodwin, Robert Hancock, East Liverpool, Ohio, 53 Univ. Pl.
Gower, William Macdonald, New York, N. Y., 12 S W B
Gray, Robert Topliff, Syracuse, N. Y., 27 Vandeventer Ave.
Greene, Bartholomew Andrew, Jr., Brooklyn, N. Y., 28 Vandeventer Ave.
Grimes, Murray Bell, Pittsburgh, Pa., 42 Hill
Gross, Albert Philip, New Rochelle, N. Y., 16 Edwards Pl.
Groth, Gordon Harold, Cleveland, Ohio, 3 M D
Grubb, Armstead Otey, Boise, Idaho, 34 Bank St.
Gulick, Ronald Abram, Gladstone, N. J., 11 Vandeventer Ave.
Haefeli, Walter, Jr., Pelham Manor, N. Y., 9 Madison St.
Hall, William Webster, Jr., New York, N. Y., 15 University Pl.
Hamill, James Fairfax, Oakland, Md., 28 Vandeventer Ave.
Hammond, Brian Reginald, New York, N. Y., 25 Chambers St.
Hardin, Martin D., Jr., Ithaca, N. Y., 5 E M W
Harvey, Bennet Botsford, Chicago, Ill., 106 H
Haselton, Norris Swift, Milwaukee, Wis., 46 Hill
Hatch, Aldis Brainerd, Jr., Wheaton, Ill., 16 Bank St.
Hauschild, Karl, Minneapolis, Minn., 11 Alexander St.
Havens, Paul Swain, Lawrenceville, N. J., 17 N E
Hawley, Robert Blake, LeRoy, Ohio, 16 Madison St.
Hayden, John Harold, Jr., New Rochelle, N. Y., 21 Chambers St.
Haym, Louis Harry, Jr., Brunswick, Ga., 10 Dickinson St.
Helm, Nelson, Louisville, Ky., 58 Wiggins St.
Henderson, Wellington Smith, Reno, Nevada, 21 Chambers St.
Hendren, Joseph William, Lewistown, Pa., 23 Bank St.
Herzog, Edward Rayne, New York, N. Y., 28 Vandeventer Ave.
Hess, Otto Theodore, Richmond, Va., 53 University Pl.
Heyn, Ernest Victor, New York, N. Y., LaVake Pl.
Hope, William Kipp, New York, N. Y., 71 P
Horovitz, Jack Isadore, Pittsburgh, Pa., 43 Jefferson Rd.
Hull, John B., Jr., Gt. Barrington, Mass., 19 Univ. Pl.
Hunter, Howard Van Euran, St. Louis, Mo, 10 Bayard Lane
Huntington, Theodore Lee, Columbus, Ohio, 20 Bank St.

Hutt, John Richard, Kansas City, Mo., 19 M D
Hynson, Robert Clendening, Lebanon, Pa., 14 Park Pl.
Irvine, Lewis Vernon, Butler, Pa., 8 N R
Ives, John Othniel, Meriden, Conn., 19 E W
Jackson, Andrew, Pittsburgh, Pa., 53 University Pl.
Jackson, John Nugent, Brooklyn, N. Y., 19 University Pl.
Jacobs, Joseph Sidney, Paterson, N. J., 164 Nassau St.
Johnson, Rolland Gerhard, Hereford, Pa., 11 Madison St.
Joyce, Charles Stebbins, So. Orange, N. J, 15 Madison St.
Keener, John Douglas, Harrisburg, Pa., 41 N E
Kehler, Stewart White, Chicago, Ill., 89 Wiggins St.
Keith, Richard William, Kansas City, Mo., 19 M D
Kelby, Robert Hendre, II., Brooklyn, N. Y., 312 C'y
Kelsey, George Nesbitt, Lakewood, Ohio, 136 Nassau St.
Kemble, William, New Rochelle, N. Y., 32 Mercer St.
Kennan, George Frost, Milwaukee, Wis., 58 Wiggins St.
Kerper, Edward Keely, Reading, Pa., 15 University Pl.
Kloman, Francis Ray, New York, N. Y., 11 Dickinson St.
Kneedler, Henry Martyn, Jr., Philadelphia, Pa., 211 C'y
Knight, Henry Lambert, Brooklyn, N. Y., 6 B
Knight, Peter Oliphant, Jr., Tampa, Fla., 15 University Pl.
Konter, Edward Fletcher, Brooklyn, N. Y., 29 Bank St.
Kuhn, John McGill, Geneva, Ohio, 8 S W B
Kuntz, Joseph Earl, Johnstown, Pa., 31 University Pl.
Lafferty, Elton Braddock, East Orange, N. J., 43 Jeffer'n Rd.
Lane, Richard Hooper, Jr., Norristown, Pa., 15 W W
Lane, Wheaton Joshua, Hampton, N. H., 9 W B
Lee, John Park, Philadelphia, Pa., 8 W M W
Lee, Leonard Charles, Jr., New York, N. Y., 66 Nassau St.
Leigh, Egbert Giles, III., Richmond, Va., 90 Nassau St.
Lembcke, Edward Nicholas, New York, N. Y., P
Lewis, Henry Harrison Walker, Bernardsville, N. J., 28 Bank St.
Lewis, Perry Joshua, Jr., San Antonio, Texas, 10 Bayard La.
Little, Elliotte Robinson, New York, N. Y., 91 B
Livingood, John Jacob, Cincinnati, Ohio, 12 S E B
Loetscher, Lefferts Augustine, Princeton, N. J., 13 S E
Ludlum, Allen, East Orange, N. J., 34 Vandeventer Ave.
Lukens, John Nevius, Burlington, N. J., 1 S E B
McAlpin, Townsend Martin, New York, N. Y., 95 P
McCarty, Wilson Chamberlain, New York, N. Y., 47 University Pl.
McClellan, Abram Looney, Jr., Richmond, Va., 11 E W
McClenahan, Richard Lee, Princeton, N. J., Joseph Henry House
McConnell. John William, Richmond Hill, N. Y., 55 Jefferson Rd.
MacDonald, John Charles Edwyn, Bridgeport, Conn., 11 Dickin'n St.
McGee, Alan Van Keuren, Freehold, N. J., 5 Madison St.
McKernon, John Woolsey, New York, N. Y., 22 Vandeventer Ave.
Mackinnon, Donald Graham, Manchester, Conn., 18 Madison St.
McMaster, Alfred Dennis, Jersey City, N. J., 33 P
McNaugher, David White, Jr., Pittsburgh, Pa., 19 Edwards Pl.
McNeely, George Hummel, Jr., Haverford, Pa., 13 N W
Mack, Lewis Adolph, Somerville, N. J., 74 B
Marks, Morris Frank, Jr., Hartford, Conn., 30 Mercer St.
Meeker, Arthur, Jr., Chicago, Ill., 24 Nassau Inn

Meurer, Joseph Albert, Jr., Philadelphia, Pa., 215 Nassau St.
Miller, Samuel Graff, Blairsville, Pa., 32 Mercer St.
Miller, Walter Abraham, Brooklyn, N. Y., 21 Edwards Pl.
Minahan, John Bertles, Green Bay, Wis., 175 Nassau St.
Miner, Gerald Fitzgerald, Chicago, Ill., 53 University Pl.
Minor, Edward Carr, Baltimore, Md., 38 Moore St.
Mitchell, William, St. Paul, Minn., 28 Vandeven. Ave.
Moffat, Huntington Allen, Brooklyn, N. Y., 10 Madison St.
Montgomery, James Alan, Jr., Philadelphia, Pa., 8 S E
Morck, Wesley Chambers, Oil City, Pa., 8 E W
Morgan, Henry Whitehouse, New York, N. Y., 8 S W B
Moses, Frederick John, Jr., New York, N. Y., 30 Mercer St.
Mudge, Charles Lyman, Cranford, N. J., 41 S E
Mundy, Cornelius Patrick, Wilmington, Del, 34 C
Neimeyer, Robert Harold, Duluth, Minn., 21 Chambers St.
Neville, James Mandeville Michael, Brookline, Pa., 23 Bank St.
Newbold, Charles, Colorado Springs, Colo., 9 S R
Newell, Thaddeus Selby, Rochester, N. Y., 31 University Pl.
Newton, Theodore, Elizabeth, N. J., 19 W W
Noble, Herbert, Jr., New York, N. Y., 47 University Pl.
Noss, Theodore Kelchner, New Holland, Pa., 3 W M W
Oates, Whitney Jennings, Evanston, Ill., 24 H'm
O'Hara, Charles Edward, Jr., Englewood, N. J., 34 Vandev. Ave.
Olney, William Brainerd, Rochester, N. Y., 39 Wiggins St.
Orvis, Franklin Whitin, Manchester, Vt., 15 University Pl.
Osawa, Yoshio John, New York, N. Y., 27 Vandeventer Ave.
Osgood, Herbert Wilkoff, Pittsburgh, Pa., 16 Bank St.
Paddock, Stephen Moule, Chicago, Ill., Nassau Inn
Palmer, William Ashman, Plainfield, N. J., 11 Dickinson St.
Parker, Henry Warren, Philadelphia, Pa., 12 S E
Parker, Lewis Mulford, Bordentown, N. J., 40 S E
Paul, George Armin, Hilton, N. J., 211 Nassau St.
Peckerman, Edward Richard, Jr., New York, N. Y., 23 Madison St.
Penick, Sydnor Barksdale, Jr., Montclair, N. J., 15 University Pl.
Pepe, John, Brooklyn, N. Y., 308 H S
Peterson, Gordon Macfarlan, Hawthorne, N. J., 20 S E
Pierce, Henry Nelson, Syracuse, N. Y., 12 Park Pl.
Plum, Roger Nelson, Rahway, N. J., 15 Dickinson St.
Porter, Alexander Gibson, Roland Park, Md., 62 B
Porter, John Freeman, East Orange, N. J., 47 Univ. Pl.
Price, Thomas Paxton, Cincinnati, Ohio, 12 S E B
Prichard, Henry Lewis, Charleston, W. Va., 11 Dickin. St.
Quarles, John Vernon, Salmon, Idaho, 11 Dickinson St.
Ramel, Emile DeWitt, Brooklyn, N. Y., 66 Nassau St.
Ramsey, Russell Archibald, Sandusky, Ohio, 11 Dickinson St.
Rankin, Bunyan Kirk, Jr., Nashville, Tenn., 22 P
Rankin, Edward Fuller, Ben Avon, Pa., 11 Dickinson St.
Reilly, Herbert Faulkner, Flushing, N. Y., 312 C'v
Remsen, Douglas Barnes, Mount Kisco, N. Y., LaVake Pl.
Reyburn, William Ewing, St. Louis, Mo., 34 Vandeventer Av.
Rhodes, Robert DePuy, Newark, N. J., 64 C
Riley, Herbert Parkes, Brooklyn, N. Y., 29 N E
Rising, Edward Saviers, New York, N. Y., 5 Madison St.

Robbins, Charles Henry Darlington, New York, N. Y., 39 Wigg's St.
Roberts, Shelby Chilton, Louisville, Ky., 9 Park Pl.
Robinson, Robert Keene, Asbury Park, N. J., 58 B S
Rosenberg, Albert Abraham, Newark, N. J., 47 University Pl.
Ross, Hernon Russell, Johnson, Vt., 55 Jefferson Rd.
Ross, Palmer Flower, Minneapolis, Minn., 15 N M R
Russell, Donald, New York, N. Y., B S
Russell, Trusten Wheeler, Wilkes-Barre, Pa., 12 Prin't'n Ave.
Ryan, William Keane, Haverford, Pa., 31 University Pl.
Saul, Charles Dudley, Jr., Chestnut Hill, Pa., 27 Edwards Pl.
Schlosberg, Harold, Brooklyn, N. Y., 19 S E
Schotland, Joseph Jedel, Newark, N. J., 10 E M W
Scott, David Gallup, New York, N. Y., 10 Madison St.
Scott, Robert Archibald, New York, N. Y., 21 Chambers St.
Scudder, Raymond Dumont, Honolulu, T. H., 13 E W
Shackelford, Richard Tillard, Baltimore, Md., 90 Nassau St.
Sherman, Edgar Jay, 2nd., Winchester, Mass., 21 Chambers St.
Sherrerd, William Dusenberry, Jr., Haddonfield, N. J., 8 E W
Silberman, Robert Paul, Newark, N. J., 10 E M W
Simons, Charles Dewar, 3rd., Dongan Hills, S. I., Peacock Inn Annex
Smith, Forrest Sayles, Jersey City, N. J., 30 Wiggins St.
Smith, Justin Vander Velde, Minneapolis, Minn., 22 Hill
Snover, Charles Frederick, East Orange, N. J., 45 Vand. Ave.
Snyder, Robert Murray, Summit, N. J., 14 Bank St.
Sommers, Edward, St. Paul, Minn., 28 Vand. Ave.
Sour, Robert Bandler, New York, N. Y., 21 Edwards Pl.
Spencer, John Leak, Jr., Charlotte, N. C., 15 Dickinson St.
Stallman, Frederick Baden, Hastings-on-Hudson, N. Y., 7 Park Pl.
Stephens, Donald, New York, N. Y., 10 Bayard Lane
Stephenson, George Storer, Westport, Conn., 53 University Pl.
Stevenson, Theodore Dwight, Princeton, N. J., 86 Mercer St.
Stout, Frederic Sturges, Ardmore, Pa., 4 A H
Strayer, Joseph Reese, New York, N. Y., 11 Alexander St.
Street, Julian, Jr., New York, N. Y., 5 N D
Sturges, John Adams, New York, N. Y., 15 University Pl.
Sturges, Philemon Fowler, Providence, R. I., 21 M D
Sturges, Ralph Alonzo, Jr., New York, N. Y., 34 Vand. Ave.
Sykes, Sam, Scranton, Pa., 8 Hamilton Ave.
Tauchert, Elwyn Harding, Nutley, N. J., 21 Chambers St.
Taylor, Charles Minor, II., Little Rock, Ark., 27 University Pl.
Thomas, James Moulton, Baltimore, Md., 62 B
Thomas, Lawrence Sheldon, Washington, D. C., 19 Univ. Pl.
Thompson, Benjamin Franklin, Houston, Texas, 84 H
Thorne, James Ward, Jr., Chicago, Ill., 44 Vandeventer Ave.
Thorpe, James Ruggles, Minneapolis, Minn., 312 H'm
Timolat, Louis King, Red Bank, N. J., 41 Vand. Ave.
Trax, Judson Edward, Oil City, Pa., 32 Vandeventer Ave.
Treat, Samuel Becker, Rockford, Ill., 24 S E
Trowbridge, Winthrop, Brooklyn, N. Y., 14 S D
Twyeffort, Louis Hollenback, Paris, France, 1 B H'm
Tyler, Thomas Henry, Bristol, Tenn., 55 Jefferson Rd.
Tyson, Philip Harold, Princeton, N. J., Cleveland Lane
Van Cleve, Robert Spencer, Erie, Pa., 4 A H

Van Gytenbeek, Rodolph Johan, Paterson, N. J., 11 Madison St.
Van Riper, Kenneth Ernest, New York, N. Y., 10 Moore St.
Van Wyck, George Lee, Belmont, Mass., 45 Park Pl.
Vogt, Herbert George, Buffalo, N. Y., 51 Park Pl.
Wales, Henry Whitwell, Jr., LaGrange, Ill., 10 Madison St.
Walker, Elbridge, Jr., Allentown, Pa., 11 S E B
Wallis, Allan Dinsmore, Jr., Wyncote, Pa., 10 Bayard Lane
Warburton, Frank Welles, New York, N. Y., 12 S W B
Waterman, Albert Wright Dickinson, Kirkwood, Mo., 5 N M R
Waterman, Ransom, Northampton, Mass., 47 Park Pl.
Weiser, Charles John, Jr., Decorah, Iowa, 41 Hill
Wheelock, Webster, Jr., St. Paul, Minn., 15 Dickinson St.
Whitaker, Anthony Howe, Cedar Grove, Phila., Pa., 10 Bayard Lane
Whitney, Hurd, New York, N. Y., 3 N E
Wicoff, John Edward, Plainsboro, N. J., 7 S W B
Williams, Charles Watkins, Eccleston, Md., 94 H
Williams, John Castree, New York, N. Y., 44 Hill
Wilson, Carl Vogt, Louisville, Ky., 14 E W
Wilson, Horace H., New York, N. Y., 9 Madison St.
Wilson, Linton Rayburn, Kittanning, Pa., 23 N E
Wilson, Robert Graham, Pasadena, Calif., 15 Dickinson St.
Wingate, Roy Wilson, Jr., Arlington, N. J., 9 S R
Winsten, Felix Heert, New Rochelle, N. Y., 47 Univ. Pl.
Wintersteen, Joseph May, Philadelphia, Pa., 31 L
Winton, John Norton, Minneapolis, Minn., 312 H'm
Wisely, Edward Burdick, Port Richmond, S. I., N. Y., 12 Park Pl.
Wood, Frederic Turnbull, Philadelphia, Pa., 22 Madison St.
Woods, Charles Albert, Jr., Pittsburgh, Pa., 4 A H
Yenchar, John George, Wilkes-Barre, Pa., Princeton Tutoring School
Zachry, Greer, New York, N. Y., 66 Wiggins St.

A.B. Freshmen.....320

CANDIDATES FOR THE DEGREE OF B.S.

Aldrich, Robert Henry, Jr., Princeton, N. J., 41 Vandeventer Ave.
Allaband, William Allee, Denton, Md., 45 Park Pl.
Allen, Stuart Mason, St. Paul, Minn., 9 N M R
Alten, William Henry Vail, Sea Cliff, N. Y., 12 S M R
Anderson, Lansdell, New York, N. Y., 53 University Pl.
Atwater, Robert Morrisson, Evanston, Ill., 31 University Pl.
Aydelotte, William, New York, N. Y., 14 Chambers St.
Bailey, Oliver Satterthewaite, Cincinnati, Ohio, 17 Edwards Pl.
Barnett, Hugh Wilson, Jr., Springfield, Ohio, 17 N W
Batten, George, Montclair, N. J., 15 University Pl.
Beares, Charles L., Jr., Pittsburgh, Pa., 34 Vandev't'r Ave.
Beattie, Charles Robert, East Orange, N. J., 30 Wiggins St.
Beattie, Robert Wetherston, Brooklyn, N. Y., 28 Vandeventer Ave.
Beesley, Jesse Cox, Jr., Murfreesboro, Tenn., 12 C
Bentley, Everett Gordon, New York, N. Y., 10 W W
Bergen, Paul David, Milwaukee, Wis., 1 S E
Biddle, Craig, Jr., Philadelphia, Pa., 31 University Pl.
Botsford, Edward Pottle, New York, N. Y., 163 Nassau St.

Bowers, George Waldron, Iron River, Mich, 10 Dickinson St.
Bray, Charles William, Youngstown, Ohio, 53 Univ. Pl.
Bredburg, Elmer Vincent, Arlington, N. J., 16 S M R
Burchfield, Albert Horne, Jr., Pittsburgh, Pa., 19 Edwards Pl.
Butterworth, William Walton, Jr., New Orleans, La., 41 Hill
Caldwell, Charles William, Jr., Yonkers, N. Y., 15 University Pl.
Campbell, William MacFarlane, Pittsburgh, Pa., 2 A C
Carr, James Murray, Pittsburgh, Pa., 46 L
Carruthers, James Richardson, Glendale, Ohio, 36 Vandev't'r Ave.
Carson, Boulds Burnett, Houston, Texas, 53 University Pl.
Carson, Robert Campbell, Jr., Rahway, N. J., 53 University Pl.
Case, Benton Janney, Minneapolis, Minn., 23 Madison St.
Caskey, Benjamin Roland, Philadelphia, Pa.
Cleaves, Stephen Campbell, Oil City, Pa., 362 C'y
Cleckley, Hervey Milton, II., Augusta, Ga., 101 H
Coleman, Lloyd Pennington, East Orange, N. J., 30 Wiggins St.
Colket, William Lippincott, Bryn Mawr, Pa., 10 Bayard Lane
Collins, Herbert Morgan, Haverhill, Mass., 10 M D
Collins, Robert Hazen, Haverhill, Mass., 11 Dickinson St.
Connor, Frank Hayden, Los Angeles, Calif., 27 Vandeventer Ave.
Constant, Frank Woodbridge, Princeton, N. J., 14 M D
Coppock, Wilson Davis, Troy, Ohio, 14 N D
Cunningham, George Motter, Washington, D. C., 56 B S
Curtiss, Stiles Judson, Buffalo, N. Y., 32 P
Dale, David Ernst, Butler, Pa., 11 S M R
Darnell, Thomas Herbert, New York, N. Y., 13 Park Pl.
Davis, Charles Edmond, Jr., Albany, N. Y., 31 L
Davis, Robert Luther, Olean, N. Y., 7 Park Pl.
Derby, George Townsend, Princeton, N. J., 37 Wiggins St.
Dickerman, Gilbert Kent, Duluth, Minn., 15 University Pl.
Dill, William Leslie, Jr., Paterson, N. J., Jefferson Rd.
Dodge, Harry Whitfield, Napoleanville, La., 11 Dickinson St.
D'Oench, Russell Gilchrist, Old Westbury, N. Y., 19 Univ. Pl.
Domoto, Taki, Oakland, Calif., Nassau Inn
Downey, Robert Arthur, Jr., Oswego, N. Y., 11 B
Doyle, Herbert Nelson, Trenton, N. J., 64 Wiggins St.
Draper, Lenard Ames, Duluth, Minn., 4 E M W
Drews, Theodore William, Sycamore, Ill., 41 Vandeventer Ave.
Duncan, Acheson Johnston, Leonia, N. J., 42 N E
Duncan, John Vernon, New York, N. Y., 15 Dickinson St.
Duys, John Henry, Jr., Larchmont Manor, N. Y., 9 M D
Edgar, John Blanchard, Cranford, N. J., 53 University Pl.
Ellinger, Ernest, Jr., New York, N. Y., 30 Mercer St.
Etheridge, Oliver Richardson, Atlanta, Ga., 30 Bank St.
Feiner, Benjamin Franklin, Jr., New York, N. Y., 23 Madison St.
Fielding, Gwynn Paul, Ridgewood, N. J., 32 Vandev. Ave.
Foresman, Alan McCormick, Montclair, N. J., 136 Nassau St.
Forgie, Norton Ellsworth, Buffalo, N. Y., 32 P
Frank, Charles Hallock, E. Cleveland, Ohio, 14½ Vandeventer Ave.
Fudge, Donald Graves, Elmira, N. Y., 21 Chambers St.
Fulle, Richard Milton, Montclair, N. J., 14 W W
Garland, George Frederick, Douglaston, L. I., 47 University Pl.
Gilbert, William Kelledy, Washington, D. C., 7 B

Gillespie, Harold Shalor, Bound Brook, N. J., 15 S D
Gordon, Herbert Lyon, Philadelphia, Pa., Nassau Inn
Gray, Alexander Barr, Paterson, N. J., 25 Chambers St.
Gray, Edward Wyllys Taylor, Jr., Montclair, N. J., 14 Madison St.
Green, Edward Darwin, Cleveland, Ohio, 19 Bank St.
Green, Edward Melvin, Jr., Harrisburg, Pa., 122 Moore St.
Griffith, Richard Gordon, Indianapolis, Ind., 15½ Chamb. St.
Ham, Mason Livingston, Providence, R. I., 15 Dickinson St.
Hamilton, Gerald Bruce, Los Angeles, Calif., 9 Park Pl.
Hamlin, John Frederick, New York, N. Y., 29 Bank St.
Harding, Douglas Dyer Badger, Kansas City, Mo., 143 L
Hardy, Charles Douglas, Summit, N. J.. 30 Mercer St.
Hayes, Richard Shapleigh, Passaic, N. J., 39 S E
Hazlett, Howard, II., Wheeling, W. Va., 63 L
Hemminger, Charles Edward Harvey, Rockwood, Pa., 11 S E B
Henkel, Marvin Victor, Cleveland, Ohio, 311 H'm
Hibbard, William Gold, Chicago, Ill., 31 University Pl.
Hicks, Lewis Wenman, Jr., Pittsburgh, Pa., 14 Edwards Pl.
Hill, William Reynolds, Jr., New York, N. Y., 71 P
Hills, Ralph Gorman, Washington, D. C., 300 H'm
Hilyard, Samuel Banta, Asbury Park, N. J., 15 S D
Hinchman, Theodore Henry, Jr., Detroit, Mich., 19 Olden St.
Hoff, Arthur William Bainbridge, New York, N. Y., 109 P
Hofius, Frederick Lacy, Seattle, Wash., 15 University Pl.
Horton, George Plant, Columbus, Ohio, 10 Moore St.
Howard, Albert Franklin, Bradford, Mass., 11 E B
Hunter, Richard Connely, New York, N. Y., 20 W W
Hurditch, Percival Russell Raub, Plainfield, N. J., 31 University Pl.
Ives, Loyal Tuttle, New Brunswick, N. J., 11 Alex. St.
Jackson, William Reginald, Germantown, Pa., 19 University Pl.
Jenney, John Lord King, Syracuse, N. Y., 19 University Pl.
Jessup, Joseph Paschall, Ridgewood, N. J., 16 Bank St.
Johnson, William Cumming, Jr., Memphis, Tenn., 166 Nassau St.
Joseph, Jay Bernard, Cincinnati, Ohio, 9 W B
Kennedy, Arthur, Jr., Garden City, N. Y., 12 S M R
Kerr, William King, Jamestown, R. I., 6 B
Kingham, John Gordon, Indianapolis, Ind., 95 P
Kirby, Donald Robinson, Duluth, Minn., 63 H
Kirk, John Sinclair, Portland, Ore., 14 W W
Kleinhaus, Lewis Charles, Newark, N. J., 12 Park Pl.
Knapp, Sanford Reynolds, 3rd., Syracuse, N. Y., 12 Princeton Ave.
Kopf, Carl Heath, Buffalo, N. Y., 51 Park Pl.
Kurzrok, Harry Benjamin, New York, N. Y., 2 Nassau St.
Lackey, Vaden Major, Nashville, Tenn., 14 H'm
Larrabee, William Morse, Bayside, N. Y., 58 Wiggins St.
Lee, Aubrey Ferrell, San Matio, Calif., 27 Edwards Pl.
Lee, Richard Henry, Washington, D. C., 34 S E
Lemon, James Hanson, Washington, D. C., 19 S M R
Lesser, Howard Arthur, New York, N. Y., 9 Madison St.
Levin, Edwin Herbert, New York, N. Y., 32 Mercer St.
Lewis, Hallett Nixon, New York, N. Y., 14 Bank St.
Lloyd, Edmund Grindal Rawson, Philadelphia, Pa., 19 University Pl.
Long, Robert Taylor, Akron, Ohio, 44 Vandeventer Ave.

Luke, John Guthrie, Tarrytown, N. Y., 41 Hill
MacAdams, Howard Bailey, Allenhurst, N. J., 44 C
McClintock, Franklin Trunkey, Spokane, Wash., 136 Nassau St.
McCreery, Raymond Carson, Fall River, Mass., 47 University Pl.
McGean, John Phillips, Cleveland, Ohio, 12 Chambers St.
McKinley, Robert Baldrige, Pittsburgh, Pa., 22 M D
McLeod, Ralph Carpenter, Pittsburgh, Pa., 53 L
McMahon, Henry Easton, Brooklyn, N. Y., 10 E B
McMillan, Edward Louis, Pittsburgh, Pa., 34 Vandev'r Ave.
Martin, Richard, Muskogee, Okla., 11 Alexander St.
Martino, Inigo de, Santauder, Spain, 53 Park Pl.
Mathews, Frank Pelletreau, New York, N. Y., 32 Vandev. Ave.
Maxwell, John Cleaveland, New York, N. Y., 20 Linden Lane
Maycock, Burt Heath, Buffalo, N. Y., 12 Chambers St.
Mead, Theodore Eugene, Chicago, Ill., 15 Dickinson St.
Mekeel, Haviland Scudder, Montclair, N. J., 36 Vandev. Ave.
Merriman, Charles Henry, III., Providence, R. I., 32 Mercer St.
Milbank, Robbins, New York, N. Y., 14 L
Miller, Morris Barnes, Pasadena, Calif., 31 University Pl.
Mitchell, Thomas Wierman, Buffalo, N. Y., 143 L
Moody, Horace Walker, Atlantic Highlands, N. J., 5 M D
Moore, Theodore McGinnes, Danville, Pa., 13 S M R
Movius, Gilbert Hurst, Lidgerwood, N. D., 23 Madison St.
Mudge, Burton, Jr., Chicago, Ill., 66 Nassau St.
Mudge, William LeRoy, Jr., Chambersburg, Pa., 13 N W
Mulford, William Webb, Jr., Salem, Ohio, 14 N D
Murdock, James Moorhead, Jr., Polk, Pa., 11 Alexander St.
Musser, Daniel Boulton, Scranton, Pa., 11 Alexander St.
Myers, Walter Kendall, Mercersburg, Pa., 36 S E
Neil, Henry, Jr., Hinsdale, Ill., 136 Nassau St.
Nields, James Fulton, Jr., Princeton, N. J., 63 Prospect Ave.
O'Brien, Robert James, St. Paul, Minn., 44 C
Oliver, Rowland Grant, New York, N. Y., 74 B
O'Reilly, Hugh Campbell, Hempstead, N. Y., 66 Nassau St.
Outhwaite, Joseph Hodson, Columbus, Ohio, 90 Nassau St.
Pagenkopf, Frank Karl, Chicago, Ill., 10 N E
Parsons, Kenyon, Jr., Brooklyn, N. Y., 22 Vandev. Ave.
Paton, Richard Townley, Princeton, N. J., 9 S D
Paynter, Richard Kates, Jr., New York, N. Y., 91 B
Penney, Roswell Kemper, New York, N. Y., 53 N. Tulane St.
Perrine, Charles Fish, Red Bank, N. J., 65 Wiggins St.
Perry, David Long, New Castle, Pa., 309 H'm
Phillips, George Ogden, Lansdowne, Pa., 19 University Pl.
Phillips, David Harvey, Bradford, Pa., 74 B
Piel, Roland Parlin, Jackman Station, Me. 36 Vandeventer Ave.
Ralph, Martin Nathaniel, Jamaica, N. Y., 46 Park Pl.
Rampona, James Raymond, Youngstown, Ohio, 215 Nassau St.
Reilly, Edgar Joseph, Jr., Youngstown, Ohio, 53 Univ. Pl.
Renshaw, Lloyd, Haverford, Pa., 19 Univ. Pl.
Rentschler, Walter Anthony, Hamilton, Ohio, 4 E M W
Reuter, Clifford Silva, Jr., New York, N. Y., 53 University Pl.
Ritchie, Thomas Macpherson, Montclair, N. J., 7 B
Robertson, Robert Stoddart, Tarrytown, N. Y., 19 Bank St.

Robinson, George Mather, Detroit, Mich., 27 University Pl.
Rogers, Walter Shillaber, New York, N. Y., 31 University Pl.
Ross, John M., Jr., Knoxville, Tenn., 6 W B
Ross, Walter Willard, Jr., Evanston, Ill., 66 Nassau St.
Sada, Andres G., Monterrey, Mexico, 11 Dickin'n St.
Sahler, Carl Philip, Harlingen, N. J., 44 B S
Sams, Robert Shields, Atlanta, Ga., 88 Moore St.
Sawyer, Randall Fay, Montclair, N. J., 136 Nassau St.
Scattergood, George Longhead, Philadelphia, Pa., 51 University Pl.
Schwingel, Milton Frederick, Great Falls, Mont., 16 Bank St.
Scull, William Stackhouse, Bryn Mawr, Pa. 53 L
Shore, Stuart Wendell, New Rochelle, N. Y., 80 Alex. St.
Siering, Robert Ferdinand, Brooklyn, N. Y., 14 S D
Sloan, David Bartlett, Nutley, N. J., 80 Wiggins St.
Smith, Forrest Stuart, Louisville, Ky., 14 Hamilton Ave.
Smith, William Matteson, Poughkeepsie, N. Y., 18 Madison St.
Solomon, Ambrose Ehrlich, Savannah, Ga., 11 Vandeven. Ave.
Sowles, Harper Melvin, Salt Lake City, Utah, 10 Bayard Lane
Stalker, William Burnett, Montclair, N. J., 40 N E
Steeger, Henry, New York, N. Y., LaVake Pl.
Stengel, Edwin Christian, Newark, N. J., 64 C
Stephenson, Isaac Watson, Marinette, Wis., 18 Madison St.
Stilwell, Neil Conwell, New York, N. Y., 8 Madison St.
Stoner, Frank Rahn, Jr., Sewickley, Pa., 2 A C
Stout, Edmund Coffin, Jr., South Orange, N. J., 15 Univ. Pl.
Sutherland, David Albert, Freeport, N. Y., 29 Bank St.
Swan, James Delas, Jr., Wilmette, Ill., 43 Vandeventer Ave.
Thomas, Charles Derastus, Jr., Peoria, Ill., 26 Bank St.
Tiedeman, Carsten, Savannah, Ga., 27 University Pl.
Tillson, Saxby Merle, Fall River, Mass., 9 S R
Todd, Frederick Porter, New York, N. Y., 10 Bayard Lane
Townley, Richard, Elizabeth, N. J., 66 Nassau St.
Townsend, Frank Pilgrim, Jr., East Orange, N. J., 10 Madison St.
Trapnell, Wallace Probasco, New York, N. Y., 19 University Pl.
Trumbull, Morris Stewart, New York, N. Y., 44 Hill
Tuller, Lawrence Hall, Minneapolis, Minn., 53 Univ. Pl.
Turner, Edward Harold, Clarksburg, W. Va., 27 Edws. Pl.
Tyson, Robert Sealy, New York, N. Y., 47 Park Pl.
Underwood, Francis Hynes, Eyota, Minn., 27 Chambers St.
Vanderbilt, William Henry, Newport, R. I., 212 C'y
Van Rensselaer, Charles Augustus, Jr., Oyster Bay, N. Y., 4 L P
van Zelm, Hugh Hamer, New Rochelle, N. Y., 19 Madison St.
Veeder, Raymond, Schenectady, N. Y., 27 Univ. Pl.
Viehmann, George Anthony, New Brunswick, N. J., 15 Univ. Pl.
Walbridge, Carlton Barnes, Toledo, Ohio, 20 Bank St.
Wall, Garrett Buckner, Jr., Richmond, Va., 15 S D
Wallace, Leslie John, Newark, N. J., 19 S W
Wallace, Robert Gardner, Maplewood, N. J., 30 Wiggins St.
Warnock, Malcolm Roe, Cranford, N. J., 16 S E
Waterbury, Lawrence, Jr., New York, N. Y., 19 University Pl.
Weinberg, Charles Morris, Greenville, Miss., 36 N E
Wemmer, William Henry, Lima, Ohio, 13 A H

Williams, N. B.,	Evanston, Ill.,	2 A H
Willoughby, Woodbury,	Washington, D. C.,	62 C
Wilson, Samuel Frederick,	Newark, N. J., 31	University Pl.
Wittmer, Henry Hatten,	Philadelphia, Pa.,	90 P
Zinsser, August, Jr.,	New York, N. Y.,	33 Hill

B.S. Freshmen 235

CANDIDATES FOR ENGINEERING DEGREES

Archer, Francis Williams,	Bluefield, W. Va., 36	Vandeventer Ave.
Bankson, Woodford,	Ardmore, Pa.,	19 Univ. Pl.
Birdsall, John Manning,	Toms River, N. J., 45	Vandeventer Ave.
Boohecker, James McEniry,	Brooklyn, N. Y.,	7 B
Caldwell, Chester Clingon,	San Antonio, Texas,	9 W W
Chamberlain, Pierce Annesley, Jr.,	Verona, N. J.,	18 S M R
Cochran, James Henry,	Williamsport, Pa.,	47 Univ. Pl.
Crawford, Robert McArthur,	Cleveland, Ohio,	40 B S
Curran, Kenneth James,	Brooklyn, N. Y.,	54 B
Daggett, Stanley Putnam,	New York, N. Y., 43	Vandeventer Ave.
Farmer, John Albert,	Madison, N. J., 28	Vandeventer Ave.
Galban, Julio Snarez,	Santa Barbara, Calif., 53	Park Pl.
Green, William Edwin,	St. Louis, Mo.,	19 Edwards Pl.
McDougal, Wheeler,	Peoria, Ill.,	66 Nassau St.
Marshall, Robert Dickson, III.,	Dayton, Ohio,	101 H
Nisbet, William Browning, Jr.,	Gt. Barrington, Mass., 34	Vand. Ave.
Seufert, Walter Christie,	Englewood, N. J.,	15 Univ. Pl.
Shields, Hamilton LeRoy,	Bennington, Vt.,	15 Univ. Pl.
Slade, Charles Blount, Jr.,	New York, N. Y., 20	Linden Lane
Stockham, Hartrauft,	Perryman, Md.,	42 Murray Pl.
Tappen, Kirby Hewitt,	Bryn Mawr, Pa., 28	Vand. Ave.
Thatcher, John Howard,	Brooklyn, N. Y.,	46 Wiggins St.
Tilgner, Charles, Jr.,	Brooklyn, N. Y.,	1 E H'm
Turner, Burnett Coburn,	Washington, D. C.,	14 Park Pl.
Updike, Oscar Leroy,	Princeton, N. J.,	R. F. D. No. 2
Wailes, Edward Thompson,	Northport, N. Y.,	46 Hill
Weis, John Harold,	Olean, N. Y.,	19 Edwards Pl.

Engineering Freshmen.....27

STUDENTS QUALIFYING FOR REGULAR STANDING

Adams, Foster,	Plandome, L. I.,	10 Moore St.
Allen, Reece DeCourse,	Wichita Falls, Texas,	143 C'y
Alverson, Albert Hole,	Rockford, Ill.,	235 Nassau St.
Bakewell, William,	Prescott, Arizona,	98 Nassau St.
Baldwin, Edwin Appleton,	West Orange, N. J.,	21 Olden St.
Barbee, Dennis Edward, Jr.,	Little Rock, Ark., 41	Jefferson Rd.
Becker, Paul Austin,	Newark, N. J.,	11 M D
Bedell, Harry Perlee,	New York, N. Y., 53	N. Tulane St.
Blanton, John Matthews,	Abilene, Texas,	6 A C
Boehland, Robert Remington,	Rockford, Ill.,	235 Nassau St.
Brown, Richard Lyon,	Evanston, Ill.,	110 Moore St.
Brubaker, Earl Abraham,	Lebanon, Pa.,	41 Park Pl.

Buckner, Allen Marion,	Owensboro, Ky.,	49 Park Pl.
Butler, James Wright, Jr.,	Galveston, Texas,	43 A S
Cairns, John Alexander,	Newark, N. J.,	19 S W
Campbell, James John, Jr.,	Pittsburgh, Pa.,	90 P
Carney, Robert Wallace,	Brookline, Mass.,	90 Nassau St.
Carroll, Arthur Pierre,	New York, N. Y.,	86 Vandev. Ave.
Carter, David Thomas,	Montclair, N. J.,	9 Willow St
Chapple, Joe Mitchell Prentice,	Ashland, Wis.,	19 Bank St.
Coleman, Clarence Louis, Jr.,	Chicago, Ill.,	3 Madison St.
Coleman, William Jr.,	Union, S. C.,	25 Chambers St.
Conrad, William West,	Forest Hills, L. I.,	15 Madison St.
Corrigan, Charles Eugene, Jr.,	Pittsburgh, Pa.,	90 Nassau St.
Critchlow, Walter Murphy,	Salt Lake City, Utah,	5 W M W
Crum, Harry Watson,	Derry, Pa.,	14 N W
Darnell, James Lee, Jr.,	New York, N. Y.,	13 Park Pl.
Donohue, William Graham	Donald, Greensburg, Pa.,	112 Nassau St.
Dunning, Ranald Gardner,	Mingo Junction, Ohio,	35 N E
Eilers, Francis Farny,	New York, N. Y.,	25 Hill
Ewart, William Frederick,	Pittsburgh, Pa.,	21 Edwards Pl.
Faletti, Stephen Lawrence,	Spring Valley, Ill.,	49 Park Pl.
Faulkner, Rudolf Virchow,	Little Rock, Ark.,	230 Nassau St.
Follis, Ralph Gwin,	San Francisco, Calif.,	19 Univ. Pl.
Fowler, Frederick Curtis, Jr.,	Seattle, Wash.	
Frieberg, Abraham Edgar,	Cincinnati, Ohio,	32 Hill
Gardner, Donfred Henry Huber,	Massillon, Ohio,	Nassau Inn
Gardner, Dozier Lee,	St. Louis, Mo.,	90 Nassau St.
Garis, Roger Carroll,	East Orange, N. J.,	21 Nassau Inn
Garside, Charles,	Meriden, Conn.,	43 L
Gates, John Hobart,	East Haven, Conn.,	41 Park Pl.
Gilfillan, Alexander Boyd,	Pittsburgh, Pa.,	98 B
Hall, Robert Tremaine,	Pittsfield, Mass.,	41 Park Pl.
Hammer, Victor, J.,	New York, N. Y.,	25 Bank St.
Hanna, William McAfee,	Washington, D. C.,	59 Tulane St.
Harlan, Ralph James,	Muncie, Ind.,	16 Stockton St.
Hart, Paul Richmond,	Franklin, Pa.,	32 Wiggins St.
Hart, Thomas James,	San Antonio, Texas,	7 N D
Hartshorn, Wilbur Wayne,	Boston, Mass.,	13 E W
Harvey, Joseph Chalmers,	Gladymo, Pa.,	19 Madison St.
Hawk, James Gustin,	Cincinnati, Ohio,	23 Williams St.
Healy, Arthur Kelly,	New York, N. Y.,	36 Vandev. Ave.
Hilsman, Agnew Hodge,	Albany, Ga.,	27 Edwards Pl.
Holmes, Lee Grant,	McDonogh, Md.,	5 W B
Hunt, Glenn Alfred,	Denver, Colo.,	71 Wiggins St.
Hyde, Benjamin Winfield,	Kansas City, Mo.,	90 Nassau St.
Jamieson, Thomas Crawford,	Trenton, N. J.,	2 C H
Jenkins, William Inman,	Chattanooga, Tenn.,	23 Williams St
Johnson, Robert Groat,	Hudson, N. Y.,	46 Spring St.
Kadetsky, Alvin Benjamin,	Buffalo, N. Y.,	215 Nassau St.
Kern, William Cooper,	Indianapolis, Ind.,	47 Park Pl.
King, Clinton Blair,	Fort Worth, Texas,	Nassau Inn
Kraft, George Jerome,	Newburgh, N. Y.,	25 Chambers St.
Lawson, Albert Edward,	Philadelphia, Pa.,	32 Wiggins St.
Lee, Henry Davis,	Elkins, W. Va.,	2 Nassau St.

Lee, Ralph William, Jr., Washington, D. C., 25 Edwards Pl.
Lee, Robert Harris, Atlantic City, N. J., 21 Chambers St.
Longwell, Benton Elkins, Jr., Johnstown, Pa., 19 University Pl.
Lum, Peter Shun, Decatur, Ill., 65 Wiggins St.
McConnell, David Hall, Jr., Suffern, N. Y., 46 Spring St.
McCracken, Wilfred Hawthorne, New York, N. Y., 26 Bank St.
McKee, David Rice, Saranac Lake, N. Y., 57 Univ. Pl.
McKeehan, William Clayton, Jr., Clarksburg, W. Va., 28 Vand. Ave.
McLaren, Carl Frederick, Beaver, Pa., 23 William St.
McQuilkin, John Andrews, Long Beach, Calif, 24 Bank St.
Macbeth, Malcolm, St. Louis, Mo., 10 Bayard Lane
Maier, Henry William, Jr., New Britian, Conn., 110 Nassau St.
Malone, William Lawrence, New York, N. Y., 178 Nassau St.
Marx, Howard Armstrong, Yonkers, N. Y., 16 Vandev. Ave.
Mason, Samuel Anthony, Hampton, Va., 83 Jefferson Rd.
Maynard, Julian Louis, Cincinnati, Ohio, Grad. Sch. An.
Meistrell, Francis Joseph, Brooklyn, N. Y., 11 B
Merry, Charles Edgar, Cincinnati, Ohio, 27 Bank St.
Morris, Robert William, Florence, Colo., 46 Spring St.
Murrill, Ralph Stanley, Charlotte, S. C., 2 Nassau St.
Mutch, Thomas Sangster, Bryn Mawr, Pa., 23 Bank St.
Neelands, Thomas Daniel, Jr., New York, N. Y.
Nieh, Louis Kwon Kwung, Shanghai, China, 12 Chambers St.
Norrie, Lewis Gordon, New York, N. Y., 21 Chambers St.
Overstreet, Charles Leslie, Jr., St. Louis, Mo., 8 Hamilton Ave.
Owen, Virgil, Jr., Little Rock, Ark., 41 Jefferson Rd.
Owen, William Myron, Denver, Colo., 20 Bank St.
Pabst, August Uihlein, Oconomowoc, Wis., 164 Nassau St.
Palmer, Stuart P., Myersville, Md., Murray-Dodge
Peden, Edward David, Houston, Texas, 66 Nassau St.
Pilling, Robert William Stockton, Lansdowne, Pa., 11 Vandev. Ave.
Polinsky, Harry, Newark, N. J., Murray-Dodge
Purmort, Paul Walworth, Van Wert, Ohio, 23 William St.
Ramirez, José Enrigue, New York, N. Y., 22 Madison St.
Rankin, Karl Lott, Rahway, N. J., 14 Madison St.
Riordan, Eugene Arthur, Brooklyn, N. Y.
Roddey, William Lyle, Rock Hill, S. C., 29 Bank St.
Rosenwald, Joseph Sanger, Sea Cliff, L. I., 17 Witherspoon St.
Rowe, Roger Mayham, New Haven, Conn., 90 Nassau St.
Sanders, Donald McQuat, Saint Paul, Minn., 63 H
Schimmel, John, 3rd., Baltimore, Md., 10 Bayard Lane
Schlesinger, Hymen J., Pittsburgh, Pa., 55 Jefferson Rd.
Skinner, Robert Markwick, Gouverneur, N. Y., 11 Bank St.
Sotter, Harold Jacob, Pottstown, Pa., 47 University Pl.
Springer, Eustace Lawrence, Carlisle, Pa., 53 University, Pl.
Steele, Stuart John, Pittsburgh, Pa.
Stevens, William Macduff, Jacksonville, Fla., 133 L
Stone, John Sydney, Upper Montclair, N. J., 46 Spring St.
Stoneback, Roland Milton, Springtown, Pa., 175 Nassau St.
Sullivan, William Martin, Jr., Passaic, N. J., 19 University Pl.
Sutherland, Conrad James, Daytona, Fla., 1 D H'm
Tietge, Anton, Interlaken, N. J., 137 Nassau St.
Treat, Charles Herbert, Somerville, Mass., Field House

Tyson, Edmund,	Princeton, N. J.,	Cleveland Lane
Vance, John Frazier,	Rock Island, Ill.,	23 William St.
van der Gracht, Arthur,	St. Louis, Mo.,	10 Bayard Lane
van der Gracht, Ides,	St. Louis, Mo.,	10 Bayard Lane
Warren, Joseph Dougherty,	Shawnee, Okla.,	25 Chambers St.
Whitaker, Robert Chase,	Philadelphia, Pa.,	10 Bayard Lane
Witherspoon, William Dowd,	Princeton, N. J.,	48 Vander. Ave.
Wong, Siu Hop,	Hong Kong, China,	F W B
Yocum, George, Jr.,	Easton, Pa.,	9 Nassau St.

Students Qualifying for Regular Standing.....137

SPECIAL STUDENTS

Blakeley, George Bogart,	Bethlehem, Pa.,	9 Nassau St.
Edgar, Clinton Pfahler,	Newtown Square, Pa.,	17 Madison St.
Garrison, Joshua, Jr.,	Norfolk, Va.,	80 University Pl.
Kelly, Edmund B.,	Baltimore, Md.,	51 C
Klipstein, Kenneth H.,	E. Orange, N. J.,	21 P
McLean, William Pinckney,	Fort Worth, Texas,	L P
Nakamura, Hikosabura,	Takamatan, Japan,	7 M D
Nishikawa, Takane,	Ridgewood, N. J.,	82 B
Osage, Eino,	Kobe, Japan,	11 Jefferson Rd.

Special Students..... 9

PARTIAL STUDENTS

Boardman, Edwin, Jr.,	Philadelphia, Pa.,	31 B S
Conser, Forest Olen,	Alliance, Ohio,	8 A S
Hillhouse, Joseph Newton,	Ridley Park, Pa.,	Pr. Theo. Sem.
Hutchison, Ralph Cooper,	Garden City, Kans.,	36 A S
Solimene, Michael Salvatore,	Trenton, N. J.,	230 Pearl St.
Work, Samuel Alvin,	Ligonier, Pa.,	33 Bank St.

Partial Students 6

GENERAL SUMMARY

Officers		
Trustees	33	
Faculty and Instructors	214	
Assistants in Instruction	18	
Officers of Administration	23	
Graduate School		
Fellows	45	
Graduate Scholars	7	
Students on Full-Time	62	
Students on Part-Time	70	
		184
School of Electrical Engineering		4
Undergraduates		
Senior Class		
A.B.	302	
B.S.	138	
C.E.	22	
		462
Junior Class		
A.B.	272	
B.S.	152	
C.E.	19	
		443
Sophomore Class		
A.B.	250	
B.S.	170	
C.E.	16	
		436
Freshman Class		
A.B.	330	
B.S.	235	
Eng.	27	
		592
Students qualifying for Regular Standing		127
Special Students		9
Partial Students		6
Total for the year 1921-1922		2253

SUMMARY OF STUDENTS BY STATES

	G.	E.E.	Sr.	Jr.	So.	Fr.	Q.	Sp.	Par.	Tot.
New York	14		108	98	140	170	23			553
New Jersey ...	33	1	84	92	82	109	14	2	1	418
Pennsylvania ...	25	1	85	80	68	85	21	2	3	370
Ohio	8	1	14	13	14	32	7		1	90
Illinois	5		19	11	18	28	7			88
Maryland	4		19	21	13	13	3	1		74
Missouri	5		12	8	13	7	6			51
Massachusetts ..	5		9	6	11	15	4			50
Dist. of Columbia	3		11	11	11	9	2			47
Minnesota	4		9	10	2	17	1			43
Connecticut	1		8	3	11	9	4			36
Texas	3		7	9	2	4	6	1		32
California	4		10	5	3	7	2			31
Tennessee	4		3	7	4	6	1			25
Georgia	2		3	6	3	6	1			21
Kentucky	2		5	5	2	6	1			21
Virginia	6		2	3	3	4	1	1		20
West Virginia..	1		3	3	6	5	2			20
Michigan	2		6	3	2	4				17
Colorado	4		2	5		2	3			16
Arkansas	1		3	4	1	2	3			14
Wisconsin	1		1	2	2	6	2			14
Indiana	2		3	2	1	3	2			13
Iowa	1		3	2	5	1				12
Rhode Island ..			2	3		6				11
Washington	4		3		1	2	1			11
Nebraska	1		2	6	1					10
South Carolina.	2		4	1			3			10
Louisiana			2	3	2	2				9
Delaware			2	1	3	1				7
Florida			2	2		1	2			7
North Carolina.	4			1	1	1				7
Idaho			1		2	2				5
Kansas	1		2		1				1	5
Vermont	1		1			3				5
Maine			1	1	1	1				4
Mississippi			1	1	1	1				4
New Hampshire			1	2		1				4
Utah			1		1	1	1			4
Montana				2		1				3
North Dakota..			1			2				3
Oklahoma	1					1	1			3
Oregon	1		1			1				3
Arizona				1			1			2
South Dakota ..			1		1					2
Alabama			1							1
Nevada						1				1

	G.	E.E.	Sr.	Jr.	So.	Fr.	Q.	Sp.	Par.	Tot.
China	4		1	3	1		2			11
Canada	7			2						9
Japan	2		1	1				2		6
Korea	4									4
Philippine Islands	1			2		1				4
England	2			1						3
France	2					1				3
Syria	1		1		1					3
Denmark	1				1					2
Egypt				1	1					2
Chile	1									1
Haiti			1							1
India	1									1
Mexico						1				1
Netherlands	1									1
Serbia	1									1
Siam		1								1
Spain						1				1
Wales	1									1
	184	4	462	443	436	582	127	9	6	2253

ABBREVIATIONS

A S, Alexander Hall, Seminary.
B, Blair Hall.
B S, Brown Hall, Seminary.
C, Campbell Hall.
C y, Cuyler Hall.
E B, East Entry, David Brown Hall.
E M W, East Middle Entry, Witherspoon Hall.
E W, East Entry, Witherspoon Hall.
G C, Graduate College.
H, Holder Hall.
H'm, Hamilton Hall.
H S, Hodge Hall, Seminary.
L, Stafford Little Hall.
L P, Lower Pyne Building.
M D, Middle Entry, Albert B. Dod Hall.
N, Nassau Hall.
N D, North Entry, Albert B. Dod Hall.
N E, North Entry, Edwards Hall.
N M R, North Middle Entry, Reunion Hall.
N R, North Entry, Reunion Hall.
N W, North Entry, West College.
P, Patton Hall.
S D, South Entry, Albert B. Dod Hall.
S E B, South East Entry, David Brown Hall.
S E, South Entry, Edwards Hall.
S M R, South Middle Entry, Reunion Hall.
S R, South Entry, Reunion Hall.
S W, South Entry, West College.
S W B, South West Entry, David Brown Hall.
U P, Upper Pyne Building.
W B, West Entry, David Brown Hall.
W M W, West Middle Entry, Witherspoon Hall.
W W, West Entry, Witherspoon Hall.
'79 H, Seventy-nine Hall.

DIRECTORY

OF OFFICERS AND STUDENTS IN ALL DEPARTMENTS OF THE UNIVERSITY

The name of every Officer is printed in SMALL CAPITALS. The number in parenthesis after the name indicates the page in the Catalogue on which the name appears.

The names of students are followed by the designation of their several classes (*f*, Fellow; *g*, Graduate Student; *ee*, School of Electrical Engineering; *Sr.*, Senior; *Jr.*, Junior; *So.*, Sophomore; *Fr.*, Freshman; *q*, Student Qualifying for Regular Standing; *Sp.*, Special Student; *Par.*, Partial Student); the name of each undergraduate is followed also by an abbreviation indicating the degree for which he is a candidate, viz., *a*, Bachelor of Arts; *s*, Bachelor of Science; *ce*, Civil Engineer; *eng.*, Candidate for Engineering Degree; *ee*, Electrical Engineer.

The abbreviations of the residences of officers and students are found on opposite page

Aaronson, R. H., Jr., *Jr. s.* 5 E B
ABBOTT, F. F., *Professor*, (5), 62 Battle Rd.
Abeel, N., *So. a.* 11 L P
Adam, J. L., *So. s.* 90 Nassau St.
ADAMS, E. P., *Professor*, (5), 12 Nassau St.
Adams, F., *q.* 10 Moore St.
Adams, F. S., *Fr. a.* 8 N R
Adams, H. E., *So. a.* 8 N E
Adams, S., Jr., *Fr. a.* 72 L
Adams, W. I. L., Jr., *So. s.* U P
Agar, H. S., *f.* 214 The Western Way
Agar, W. M., *g.* 214 The Western Way
Ahlborn, H. D., *So. a.* 172 Nassau St.
Akahoshi, R., *Fr. a.* 24 C
Alden, O., III, *Sr. a.* 47 Spring St.
Aldrich, R. H., Jr., *Fr. s.* 41 Vandeventer Ave.
Aldridge, C. W., *Sr. a.* 304 H'm
Alexander, C. C., *g.* Dutch Neck, N. J.
Alexander, D. M., *So. s.* 14 C
ALEXANDER, J. W., *Assistant Professor*, (11), 29 Cleveland Lane
Alexander, W. L., *Sr. a.* 96 B
Alford, O. P., *Sr. s.* Campus Club
Allaband, W. A., *Fr. s.* 45 Park Pl.
Allen, J. H., *Jr. s.* Ivy Club
Allen, L. W., *Jr. a.* 35 P
Allen, R. D., *q.* 143 C'y
Allen, S. M., *Fr. s.* 9 N M R
Alling, E. L., *g.* 10 Boudinot St.
Alten, W. H. V., *Fr. s.* 12 S M R
Alverson, A. H., *q.* 235 Nassau St.
Alyea, H. N., *So. s.* 16 N E
Amberson, W. R., *f.* 15 E G C
Ancona, S. E., 3d, *Jr. a.* 4 W M W
Anderson, E. M., *Sr. s.* 141 L
Anderson, H. E., Jr., *Jr. s.* 122 L
Anderson, J. M., *Fr. a.* 8 Madison St.
Anderson, L., *Fr. s.* 53 Univ. Pl.
Anderson, M. E., *Sr. a.* 93 H
Anderson, R. L., *Fr. a.* 18 W W
Anderson, T. S., *So. a.* 101 L
Anderson, W. T., Jr., *f.* 76 G C
Andrews, E. D., *So. a.* 12 B
ANDREWS, J. W., *Assistant Professor*, (11), 106 Nassau St.
Andrews, R. M., *Sr. ce.* 34 N E
Angell, I. J., *So. s.* 3 S W B
Angell, T. F., *So. s.* 3 S W B
APGAR, F. R., *Purchasing Agent*, (16), Stanhope Hall

ARBUTHNOT, W. S., *Trustee*, Pittsburgh, Pa.
Archer, F. M., Jr., *Jr. a.* 82 P
Archer, F. W., *Fr. eng.* 36 Vandeventer Ave.
ARMSTRONG, E. C., *Professor*, (8), 26 Edgehill St.
Arnold, A. D., *Sr. s.* 217 Nassau St.
Arnold, B. M., Jr., *Jr. a.* 10 S E B
Arnold, J. K., *Fr. a.* 47 N. Tulane St.
Aronsohn, A., *So. a.* 58 Tulane St.
Arpee, E., *Sr. s.* Murray-Dodge
Atkinson, A. P., *Fr. a.* 11 Madison St.
Atwater, R. M., *Fr. s.* 81 Univ. Pl.
Aull, J. A., 3d, *Jr. a.* 14 B
Austin, C. L., *So. s.* 8 C H
Avery, A. G., *Fr. a.* 20 W W
Avidan, A., *Jr. a.* 13 S W
Aydelotte, W., *Fr. s.* 14 Chambers St.
Ayer, C. M., *Fr. a.* 12 P

Bachman, J. T., *Jr. s.* 24 P
Baer, H. F., *So. a.* 33 S E
Bailey, B. L., *Jr. s.* 1 M D
Bailey, F. R., Jr., *So. a.* 23 M D
Bailey, F. T., *Jr. s.* 100 P
Bailey, P., Jr., *So. a.* 22 S E
Bailey, C. F., *So. s.* 102 H
Bailey, O. S., *Fr. s.* 17 Edwards Pl.
Bain, Henry, III., *Fr. a.* 9 Madison St.
Baird, M., III., *So. s.* 14 C
Baird, W. M., Jr., *g.* 417 H S
Baker, A. deR., *Sr. a.* 44 '79 H
Baker, H. D., *g.* 84 G C
Baker, H. F., *Jr. s.* Cottage Club
Bakewell, W., *q.* 98 Nassau St.
Bakoulis, D. C., *So. a.* G C
Baldeagle, J. P., *Jr. a.* 16 M D
Baldwin, E. A., *q.* 21 Olden St.
Baldwin, J. T., *Jr. s.* 17 W W
Baldwin, T. W., *Fr. a.* 10 Bayard Lane
Ball, F. E., *Fr. a.* 16 Stockton St.
Ball, R. H., *Jr. a.* 222 C'y
Ballantine, P., *Fr. a.* 71 H
Ballard, J. D., *Sr. a.* 31 H
Bancroft, T. M., *So. s.* 21 Chambers St.
Bane, J. C., Jr., *Fr. a.* 12 Park Pl.
Bankson, W., *Fr. eng.* 19 Univ. Pl.
Barbee, D. E., Jr., *q.* 41 Jefferson Rd.
Barbour, W. D., *So. a.* 1 W M W
Barclay, J., Jr., *So. a.* 92 H
Bard, P., *Jr. a.* 1 A C
Barker, H. L., *So. a.* 8 S M R
Barkhorn, C. W., *Jr. s.* 11 W B
Barnes, A. S., *Sr. a.* 4 N R
Barnett, H. W., Jr., *Fr. s.* 17 N W
Barnett, N. A., *Jr. s.* 332 C'y
Barnhart, A. M., *So. s.* 194 Nassau St.
Barnsley, J. H., Jr., *So. s.* 2 B H
Barr, A. H., Jr., *Sr. a.* 3 S D
Barr, G. B., *So. s.* 212 C'y
Barr, W. A., Jr., *So. s.* 14 B
Barrett, J. R., *Jr. a.* 5 U P
Barringer, J. P., *So. s.* 102 H
Barrows, K. W., *Jr. a.* 91 P
Barry, A. J., *Fr. a.* 11 Dickinson St.
Bartlett, E. A., *So. s.* 142 L
Bartlett, W., Jr., *Sr. a.* 94 B
Barton, F. G., Jr., *So. s.* 113 B
Barton, W. A., *So. s.* 172 L
Bartow, N. S., Jr., *So. a.* 1 Hill
Barwise, J. H., 3rd, *Sr. a.* 22 P
Baselt, F. C., *Jr. ce.* 1 E M W
BASORE, J. W., *Associate Professor*, (9), 101 Library Pl.
BASSETT, M. E., *Instructor*, (13), 24 Dickinson St.
Batcheler, E. J., *Jr. a.* 33 P
Bates, M. C., *So. s.* 15 S W
Bathgate, J. E., 3rd, *Sr. a.* 14 S W
Bathgate, M. S., *So. a.* 3 E W
Batten, G., *Fr. s.* 15 Univ. Pl.
Battin, H. E., Jr., *So. a.* 71 B
Baugh, D., III, *So. s.* 13 A H
Baum, M., *Jr. a.* 14 S E
Beach, D. M., Jr., *So. s.* 2 D H
Beares, C. L., Jr., *Fr. s.* 34 Vandeventer Ave.
Beattie, C. R., *Fr. s.* 30 Wiggins St.
Beattie, P. C., *Jr. s.* 321 C'y
Beattie, R. W., *Fr. s.* 28 Vandeventer Ave.

Beatty, J. T., *Jr. s.* 121 L
Beaumont, A. A., Jr., *g.* 12 G C
Becker, P. A., *q.* 11 M D
Beckman, F. W., *Sr. s.* 106 Broadmead
Bedell, H. P., *q.* 53 N. Tulane St.
Beebe, R. A., *f.* 104 G C
Beebe, R. T., *So. s.* 32 Vandeventer Ave.
Beekley, J. S., *Assistant,* (16), 24 Dickinson St.
Beesley, J. C., Jr., *Fr. s.* 12 C
Beggs, G. E., *Associate Professor,* (9), 78 Jefferson Rd.
Beisler, W. H., *Assistant,* (15), 23 Bank St.
Bell, G. E. O., Jr., *Fr. a.* 9 Madison St.
Belt, F. L., *Sr. s.* 217 Nassau St.
Bender, H. H., *Professor,* (8), 120 Fitz Randolph Rd.
Bender, H. S., *g.* 53 B S
Benedict, S., *So. s.* 53 H
Bennett, E. L., *Sr. a.* 3 E M W
Bennett, E. S., Jr., *Fr. s.* 12 Chambers St.
Bennett, W. W., *Instructor,* (15), 22 G C
Bensel, J. A., Jr., *So. ce.* 30 Mercer St.
Bentley, E. G., *Fr. s.* 10 W W
Berckmans, B., *Sr. a.* 98 Nassau St.
Berg, M., *Jr. a.* 6 S W
Bergen, L. M., *Jr. s.* 1 S E
Bergen, P. D., *Fr. s.* 1 S E
Bergh, H. W., *So. a.* 11 Jefferson Rd.
Berkson, R. J. S., *Fr. a.* 25 Chambers St.
Bernheim, L. H., *Jr. a.* 301 H'm
Bernstein, T., *Fr. a.* 110 Nassau St.
Berry, J. R., *Sr. a.* 12 W B
Berry, K. W., *So. a.* 32 Mercer St.
Berry, R. S., *So. a.* 53 H
Berry, S. L., *Fr. a.* 31 Univ. Pl.
Bertolet, C. B., *Jr. a.* 9 S W B
Berwind, H A., Jr., *So. s.* 11 Alexander St.
Best, J. I., *Jr. a.* 92 P
Bethell, F. H., *Fr. a.* 15 Univ. Pl.
Beverle, A. F., *Sr. a.* 20 S W
Biddle, C., Jr., *Fr. s.* 31 Univ. Pl.
Bilheimer, W. E., Jr., *So. a.* 38 Wiggins St.
Billow, E. E., Jr., *Fr. a.* 136 Nassau St.
Bilyitch, M. S., *So. ce.* S E
Bingham, J. A., Jr., *Sr. ce.* 6 W M W
Birdsall, J. M., *Fr. eng.* 45 Vandeventer Ave.
Blackwell, F. O., Jr., *Sr. ce.* 33 L
Blair, H. E., *g.* 29 Alexander St.
Blair, W. D., *So. s.* 43 H
Blake, E. B., *Sr. a.* 72 L
Blake, H. C., *So. a.* 113 H
Blake, J. A., *Jr. s.* 82 P
Blake, T. D., *Sr. s.* 21 H
Blakeley, G. B., *Sp.* 2 Nassau St.
Blanchard, L. R., *Head Cataloguer,* (15), 51 Patton Ave.
Blankarn, M. P., *So. a.* 22 '79 H
Blanton, J. M., *q.* 6 A C
Blanton, T. L., Jr., *Jr. s.* 6 A C
Blau, M. F., *Professor,* (7), 42 Princeton Ave.
Blodget, L. T., *Sr. ce.* 61 L
Blodgett, S. M., *Fr. a.* 41 Park Pl.
Blow, F. M., *Sr. a.* 5 A H
Blow, R. A., *Fr. a.* 22 Hill
Boardman, E., Jr., *Par.* 31 B S
Boehland, R. R., *q.* 235 Nassau St.
Bogert, A. C., *Sr. s.* 28 C
Bond, R. W., *Jr. a.* 361 C'y
Bonner, D. G., *So. a.* 6 Bank St.
Bonner, K., *Instructor,* (14), 93 Alexander St.
Boohecker, J. M., *Fr. eng.* 7 B
Bope, J. A., *Fr. a.* 15 Univ. Pl.
Bostwick, W. A., Jr., *So. s.* 90 Nassau St.
Botsford, E. P., *Fr. s.* 163 Nassau St.
Botting, V., *Sr. a.* 431 C'y
Bovaird, G. C., *Jr. a.* 15 P
Bovie, H., *Proctor,* (16), 2 N M R
Bowers, G. W., *Fr. s.* 10 Dickinson St.
Bowman, A. A., *Professor,* (7) 138 Fitz Randolph Rd.
Bowman, A. D., *Jr. s.* 9 L P
Bowring, C. W., Jr., *Fr. a.* 8 A H
Boyce, J. C., *Sr. a.* 11 N D
Boyd, A. W., *Jr. a.* 12 E B
Boyd, C. N., *So. a.* 66 Nassau St.

Boyd, F. E., *Fr. a.* 21 Chambers St.
Boyd, J. R., *Fr. a.* 42 Wiggins St.
Boynton, C. E., Jr., *Jr. a.* 30 Bank St.
Bradbury, H. W., *So. s.* 16 Park Pl.
Bradley, S. K., *Jr. s.* 134 H
Bradley, U. T., *Jr. s.* 90 Nassau St.
Bradshaw, R. B., *Sr. a.* 3 E M W
Brady, C. S., *So. s.* 54 H
Braman, C. A., Jr., *Fr. a.* 21 Chambers St.
Brauer, A., Jr., *Fr. a.* 14 Edwards Pl.
Brawner, A. H., *Sr. a.* 65 C
Brawner, W. P. F., *So. a.* 63 C
Bray, C. W., *Fr. s.* 53 Univ. Pl.
Bray, T. M., *Sr. s.* 14 P
Bredburg, E. V., *Fr. s.* 16 S M R
Breen, S. A., *Sr. a.* 461 C'y
Brennan, L. J., *Jr. a.* 31 B
Brent, J. L., *Fr. a.* 62 B
Brent, W. R., *Sr. s.* 9 S E
Breslauer, M. K., *Sr. a.* 2 B
Bretz, H., *Instructor,* (14) G C
Brewer, C. E., Jr., *So. a:* 17 M D
Brewster, L. O., Jr., *Jr. a.* 11 H'm
Brewster, W. D., *Jr. s.* 16 C
Brigham, C. C., *Assistant Professor,* (11), The Bachelors
Bright, R. D., *Fr. a.* 20 E W
Broadhead, E. H., Jr., *Jr. s.* 46 Wiggins St.
Brodhead, J. E., *Sr. s.* 108 P
Brokaw, P. I., *Sr. a.* 66 Nassau St.
Brooke, R. C., *Sr. s.* 132 H
Brooks, A. E., *Jr. s.* 10 Dickinson St.
Brown, B. M., *Jr. a.* 36 Vandeventer Ave.
Brown, E. W., *Jr. s.* 82 P
Brown, G. E., *Sr. s.* 7 A H
Brown, J. D., *Instructor,* (15), 220 Westfield Ave., Elizabeth, N. J.
Brown, J. E., Jr., *Instructor,* (14), 30 Battle Rd.
Brown, J. N., *Sr. a.* 3 N R
Brown, P. M., *Professor,* (7), Absent
Brown, R. L., *q.* 110 Moore St.
Brown, W. H., Jr., *Jr. a.* 4 U P
Brown, W. N., *So. a.* 6 Bank St.
Browne, T. J., *Assistant Professor,* (11), 110 Moore St.
Browning, S. P., Jr., *Sr. a.* 2 S E B
Broyles, N. A., *Jr. s.* 52 '79 H
Brubaker, E. A., *q.* 41 Park Pl.
Bruere, J., *Fr. a.* 1 S W B
Brumder, W. G., *So. s.* 90 Nassau St.
Brunnow, R., *Fr. a.* 24 M D
Brush, M. P., Jr., *Fr. a.* 161 C'y
Bryan, W. B., Jr., *g.* 409 H S
Bryon, A. R., *So. a.* 32 L
Brussaly, M., *Sr. a.* 3 S R
Buck, J. C., *Jr. a.* 10 S D
Buckner, A. M., *q.* 49 Park Pl.
Buddington, A. F., *Assistant Professor,* (11), 15 D G C
Buddington, W. T., *Fr. a.* 12 N D
Buechner, R., *Sr. a.* 112 L
Buechner, T. S., *Fr. a.* 10 A H
Buell, E. R., *So. a.* 21 Chambers St.
Buell, R. L., *f.* 23 G C
Buermeyer, L. L., *Instructor,* (12), 106 Nassau St.
Buffum, D. L., *Professor,* (6), 60 Hodge Rd.
Buford, J. L., *Jr. a.* 61 '79 H
Burchfield, A. H., Jr., *Fr. s.* 19 Edwards Pl.
Burke, A., *f.* 1 A G C
Burke, E. T., *Sr. a.* Cannon Club
Burke, F. E., Jr., *Jr. s.* 66 L
Burke, R. J., *So. a.* 6 Bank St.
Burnham, G. W., Jr., *So. a.* 8 Hill
Burns, J. R., *Jr. a.* 80 P
Burns, R. L., *Sr. s.* 5 S M R
Bushnell, A. S., *Sr. s.* 184 L
Butler, D. C., *g.* 43 A S
Butler, H. C., *Professor,* (5), Pyne Tower, G C
Butler, J. T., Jr., *Jr. a.* 15 Jefferson Rd.
Butler, J. W., Jr., *q.* 43 A S
Butler, L. D., *Sr. a.* 57 Jefferson Rd.
Butt, S. M., *Instructor,* (13), 9 Aiken Ave.
Butterworth, W. W., Jr., *Fr. s.* 41 Hill
Byrley, P. L., *Jr. a.* 12 E B

Cairnes, C. E., *f.* 68 G C
Cairns, J. A., *q.* 19 S W
Caldwell, C. C., *Fr. eng.* 9 W W
Caldwell, C. W., Jr., *Fr. s.* 15 Univ. Pl.
Caldwell, J. R., *Sr. a.* 68 '79 H
Caldwell, J. W., 3rd, *Sr. a.* 7 E W
Caldwell, L. G., *Jr. a.* Aiken and Princeton Aves.
Callanan, J. R., *Jr. s.* 55 Jefferson Rd.
Callaway, L. S., *Sr. a.* 11 Madison St.
Cameron, D. K., *Sr. a.* 11 N W
Camp, E., *Fr. a.* 5 M D
Campbell, A. B., *Jr. a.* 2 W B
Campbell, A. S., *Jr. a.* 121 H
Campbell, H. S., *So. a.* 25 Chambers St.
Campbell, J. J., Jr., *q.* 90 P
Campbell, K., *g.* 413 H S
Campbell, W. M., *Fr. s.* 2 A C
Capen, C. A., Jr., *So. a.* 15 M D
CAPPS, E., *Professor,* (5), 150 Fitz Randolph Rd.
Capps. E., Jr., *So. a.* 1 E B
Carey, A. M., Jr., *Sr. a.* 84 P
Carney, J. V., *Jr. a.* 28 S E
Carney, R. W., *q.* 90 Nassau St.
CARNOCHAN, J. M., *Associate University Physician,* (16), McCosh Infirmary
Carpenter, L. B., *Sr. a.* 4 B
CARPENTER, W. S., *Assistant Professor,* (12) 261 C'y
Carr, J. M., *Fr. s.* 46 L
Carr, R., *Jr. a.* 10 Nassau St.
Carrick, A. W., *Jr. a.* 413 C'y
Carroll, A. P., *q.* 36 Vandeventer Ave.
Carroll, C., Jr., *Fr. a.* 24 Bank St.
Carruth, E. B., *Sr. s.* 20 P
Carruthers, D. W., *g.* 210 H S
Carruthers, J. R., *Fr. s.* 36 Vandeventer Ave.
Carson, B. B., *Fr. s.* 58 Univ. Pl.
Carson, R. C., Jr., *Fr. s.* 58 Univ. Pl.
Carter, B., *Sr. a.* 104 B
Carter, D. T., *q.* 9 Willow St.
Carter, H. P., *So. s.* 34 N E
Carter, H. S., Jr., *Jr. a.* 68 B
Carter, M., *Jr. a.* 122 L
Cartier, H. A., *Sr. ce.* Key & Seal Club
CARY, L. R., *Assistant Professor,* (10), 36 Wiggins St.
Cary, P. V., Jr., *Fr. a.* 9 Madison St.
Case, B. J., *Fr. s.* 23 Madison St.
Case, E. N., *Sr. a.* 104 B
Caskey, B. R., *Fr. s.* 14 Chambers St.
Cassady, M. L., *g.* 109 H S
Cates, M. L., *Sr. s.* 421 C'y
Causey, J. T., *Jr. a.* 8 W B
Cavanagh, S. H., *Sr. a.* 38 '79 H
Chace, J., *Jr. s.* 11 '79 H
Chace, W. E., *So. s.* 85 Univ. Pl.
Chadbourne, L., *Fr. a.* 21 Chambers St.
Chamberlain, P. A., Jr., *Fr. eng.* 18 S M R
Chamberlain, W. D., *g.* 37 A S
Chapman, C. F., *Sr. ce.* 40-50 P
Chapman, F. M., Jr., *Jr. a.* Cannon Club
CHAPMAN, P. A., *Assistant Professor,* (11), 293 Nassau St.
Chapple, J. M. P., *q.* 19 Bank St.
Charlesworth, M. P., *f.* 14 B G C
Chase, C. T., *So. s.* 122 Moore St.
Cheston, M., *Fr. s.* 41 H
Chick, J. B., *Sr. a.* 244 C'y
Chiles, A. G., *Fr. a.* 47 Univ. Pl.
Chiris, L. A., *Fr. a.* 93 Alexander St.
Chisholm, D. M., *So. s.* 8 A H
Chisholm, H. L., *Sr. a.* 101 P
Chisholm, J. R., *So. a.* 22 B
Chorlian, G. M., *Jr. s.* 9 S W B
Christen, F., *Fr. a.* 46 Park Pl.
Chuang, C. H., *g.* 14 Hamilton Ave.
Chung, J., *g.* 406 H S
Church, A., 2nd, *So. a.* 17 S E
Clark, B., 3rd, *Sr. a.* 452 C'y
Clark, C. W., II, *So. a.* 305 H'm
CLARK, F. M., *Assistant,* (15), 21 Bank St.
Clark, S. L., Jr., *Fr. a.* 10 Bayard Lane
Clarke, J. R., Jr., *Fr. a.* 12 P
Clarke, O. T., *So. a.* 30 P
Cleaves, J. B., *Jr. s.* Elm Club
Cleaves, S. C., *Fr. s.* 362 C'y
Cleckley, H. M., 2nd., *Fr. s.* 101 H

Cleland, W. E., *Instructor,* (13), 11 B G C
Clement, N. H., *Instructor,* (13), 40 Patton Ave.
Cleveland, F. G., *Fr. a.* 300 H'm
Close, H. W., *g.* 25 Murray Pl.
Cobb, A. L., Jr., *Jr. a.* 24 '79 H
Cochran, J. H., *Fr. eng.* 47 Univ. Pl.
Cochran, W., *Fr. a.* 1 A H'm
Coffin, R. C., *Sr. a.* 42 H
Colburn, G. B., *Instructor,* (13), 69 Harrison St.
Colburn, K. L., *Sr. s.* 2 S W B
Cole, F. W., *Fr. a.* 164 Nassau St.
Cole, M. L., *Jr. a.* 7 S E B
Coleman, C. L., Jr., *q.* 3 Madison St.
Coleman, C. R., *Sr. a.* 7 S W
Coleman, J. G., *Fr. s.* 38 N E
Coleman, L. P., *Fr. s.* 30 Wiggins St.
Coleman, R. B., Jr., *So. a.* 1 N D
Coleman, W., Jr., *q.* 25 Chambers St.
Coles, E. A., *Fr. a.* 15 Univ. Pl.
Colket, W. L., *Fr. s.* 10 Bayard Lane
Collins, C. P., *So. a.* 10 Dickinson St.
Collins, E. M., *Sr. s.* 5 A C
Collins, G. D., *Instructor,* (14), 47 Spring St.
Collins, H. M., *Fr. s.* 10 M D
Collins, R. H., *Fr. s.* 11 Dickinson St.
Collins, V. L., *Secretary,* (6), 51 G C
Collinson, H. N., *Jr. a.* 6 N R
Colman, W. M., *Fr. a.* 19 Madison St.
Colt, J., *Instructor,* (13), 162 Mercer St.
Comey, F. A., *So. s.* 14 '79 H
Compton, K. T., *Professor,* (8), 30 Linden Lane
Comstock, F. A., *g.* 82 G C
Comstock, G. C., Jr., *Sr. a.* 12 '79 H
Conger, S. C., *So. s.* 15 N D
Conklin, E. G., *Professor,* (5), 139 Broadmead
Conner, E. H., *Jr. s.* 138 Nassau St.
Connor, F. H., *Fr. s.* 27 Vandeventer Ave.
Conrad, W. W., *q.* 15 Madison St.
Cons, L., *Assistant Professor,* (10) 84 Alexander St.
Conser, F. O., *Par.* 8 A S
Constant, F. H., *Professor,* (7), 57 Battle Rd.
Constant, F. W., *Fr. s.* 14 M D
Cook, A. N., *g.* 1135 Greenwood Ave., Trenton, N. J.
Cook, H. E., *Jr. s.* Dial Lodge
Cook, K. S., *Sr. a.* 12 '79 H
Cooke, G. J., Jr., *Sr. a.* 185 L
Cooke, H. L., *Professor,* (8), 148 Mercer St.
Cooper, J. C., Jr., *Jr. a.* 41 H
Cooper, J. W., Jr., *Sr. a.* 23 P
Cooper, J. W. J., *Fr. a.* 84 H
Cooper, M. J., *Jr. s.* 123 L
Copeland, C. D., Jr., *Sr. a.* 94 P
Coppock, W. D., *Fr. s.* 14 N D
Corbett, F. T., *Sr. a.* 1 U P
Corcoran, D. M., *Fr. a.* 11 W W
Corcoran, F. L., *Sr. a.* Cottage Club
Cordes, V. A., Jr., *Jr. s.* Cannon Club
Cornwell, E. A., *Jr. a.* 5 S E B
Correa, E. A., *So. a.* 6 Bank St.
Corrigan, C. E., Jr., *q.* 90 Nassau St.
Corwin, E. S., *Professor,* (6), 115 Prospect Ave.
Cosgrave, J. S., *Assistant to the Treasurer,* (16), Stanhope Hall
Cottier, H., *Sr. a.* 134 L
Cotton, H. A., *Lecturer,* (12), State Hospital, Trenton, N. J.
Coudert, B. T., *Fr. a.* 31 Univ. Pl.
Courtney, W. R., *Jr. a.* 134 H
Covington, H. F., *Professor,* (6), 53 Battle Rd.
Covington, R. W., Jr., *Jr. a.* 51 '79 H
Cowan, A. J., *Sr. a.* 60 P
Cowan, P. B., *Sr. a.* 16 N W
Cox, J. A., *So. a.* 43 Maple St.
Crabbe, E. L., *So. s.* 32 Vandeventer Ave.
Craig, G. L., Jr., *Sr. a.* 154 L
Crallé, J. B., *So. a.* 2 Nassau St.

Cram, R. A., *Supervising Architect,* (14), Boston, Mass.
Cramer, W. E. W., *Sr. a.* 12 A H
Cramp, W. M., *Sr. s.* 112 L
Crawford, J., *So. a.* 15 S E
Crawford, R. M., *Fr. eng.* 40 B S
Cresswell, D., *So. a.* 74 H
Cresswell, H. C., *Sr. ce.* 138 Nassau St.
Critchlow, F. L., *Assistant Professor,* (9), 36 Univ. Pl.
Critchlow, W. M., *q.* 5 W M W
Croll, M. W., *Professor,* (8), 7½ Greenholm
Cromwell, S. L., Jr., *Fr. a.* 83 C
Crouse, O., *So. a.* 6 W B
Crum, H. W., *q.* 14 N W
Cudlipp, W. A., *Sr. a.* 84 B
Cuff, A. L., *Sr. a.* 411 C'y
Cuff, J. W., *Fr. a.* 39 Wiggins St.
Culver, E. P., *Instructor,* (13), 93 G C
Cumming, J. C., *Fr. a.* 60 B S
Cumming, W. P., *g.* 103 G C
Cuncannon, P. M., *g.* 148 G C
Cuningham, E. P., *Jr. s.* 3 S E
Cuningham, J. F., *Sr. a.* 4 S R
Cunningham, A., *Sr. s.* 152 L
Cunningham, G. M., *Fr. s.* 56 B S
Cunningham, H., *Sr. a.* 17 B
Cunningham, R. N., Jr., *Fr. a.* 11 S E B
Curran, K. J., *Fr. eng.* 54 B
Currie, J. M., *Sr. a.* 25 M D
Curtis, B. S., *Sr. s.* 25 C
Curtiss, S. J., *Fr. s.* 32 P
Cushing, L. J., *Jr. a.* 131 L
Cushman, L. A., Jr., *Sr. a.* 53 C
Cutting, J. R., *So. s.* 172 Nassau St.
Cuyler, L. B., *So. a.* 9 E W
Cuyler, R. M., *Jr. a.* 16 S W

Daggett, S. P., *Fr. eng.* 43 Vandeventer Ave.
Dahlgren, U., *Professor,* (6), 7 Evelyn Pl.
Dahlgren, U., Jr., *Jr. s.* 7 Evelyn Pl.
Dailey, L. B., Jr., *Jr. a.* 62 L
Dale, D. E., *Fr. s.* 11 S M R
Danforth, F. W., *Jr. a.* 2 N D
Daniels, R. B., *Sr. a.* 64 H
Darby, J. B., *So. s.* 9 E M W
D'Arms, E. F., *Fr. a.* 11 S M R
Darnell, J. L., Jr., *q.* 13 Park Pl.
Darnell, T. H., *Fr. s.* 13 Park Pl.
Darrell, E. F., Jr., *Fr. a.* 31 Univ. Pl.
Dashiell, A. S., *Jr. a.* 6 S W B
Davidson, D. N., *Sr. s.* 2 S W B
Davies, G. K., *Sr. a.* 5 W M W
Davis, A. P., *g.* Pyne Tower G C
Davis, B. H., *Fr. a.* 38 C
Davis, C. C., *So. a.* 9 B
Davis, C. E., Jr., *Fr. s.* 31 L
Davis, E. L., *Jr. a.* 22 L
Davis, E. R., *Fr. a.* 28 Vandeventer Ave.
Davis, F. H., *So. a.* 1 Hill
Davis, H. G., III, *So. s.* 35 Univ. Pl.
Davis, J. E., *Jr. a.* 161 L
Davis, J. L., *Trustee,* St. Louis, Mo.
Davis, M. S., *Sr. a.* A B
Davis, P. H., *g.* 21 G C
Davis, R. J., *Sr. ce.* 23 L
Davis, W. F., *Jr. s.* 8 N W
Dawes, D. C., *So. s.* 2 Nassau St.
Dawes, K. J., *Fr. a.* 5 Madison St.
Day, M. C., *Sr. s.* Quadrangle Club
Dean, W. H., Jr., *So. s.* 92 B
Decker, F. K., *So. a.* 26 Hill
deConingh, E. H., *Sr. a.* 107 P
DeLaCour, J. C., Jr., *So. s.* 90 Nassau St.
Delafield, M. L., II., *Jr. a.* 32 C
Delehanty, A. J., *Fr. a.* 2 Nassau St.
DeLong, E. S., *Sr. a.* 143 C'y
Deming, C. M., *Sr. s.* 33 '79 H
Denby, C., Jr., *Sr. a.* 131 L
Denegre, J. D., *Trustee,* St. Paul, Minn.
Dennis, H. vanM., *g.* 87 Library Pl.
Depue, R. N., *Fr. a.* 4 Madison St.
Derby, G. T., *Fr. s.* 37 Wiggins St.
Derr, T., *So. a.* 25 Edwards Pl.
Dery, C. F., *So. a.* 36 Vandeventer Ave.
Dew, W. A., *g.* 15 D G C
Dewing, H. B., *Assistant Professor,* (10), 12 Edgehill St.
Dexter, B. V., *Jr. a.* 34 P
Dibrell, F. S., *Fr. a.* 27 Univ. Pl.

Dickenson, M. P., *Sr. a.* 11 S D
Dickerman, G. K., *Fr. s.* 15 Univ. Pl.
Dickinson, H. T., *Sr. a.* 43 P
Dilks, W. H., Jr., *So. a.* 90 Nassau St.
Dill, W. L., Jr., *Fr. s.* Jefferson Rd.
Dilworth, H. P., Jr., *Sr. a.* 95 B
Dinsmore, A. A., Jr., *Jr. a.* 36 P
Dinsmore, B. B., Jr., *Fr. a.* 30 Mercer St.
Dinsmore, R. B., *Fr. a.* 14 N D
Dittman, K. A., *Jr. ce.* 1 B
Dittig, W. F., *Sr. ce.* 1 W W
Dix, T., *So. s.* 8 Madison St.
Dixon, B. H., *Sr. a.* Campus Club
DIXON, F. H., *Professor,* (8), 101 Broadmead
Dixon, G. R., *Jr. s.* 1 E M W
DIXON, J., *Trustee,* Trenton, N. J.
Dixon, W. T., *So. s.* 6 M D
Djang, F., *g.* 15 B S
Dodd, S. C., *Sr. s.* Gateway Club
Dodge, H. W., *Fr. s.* 11 Dickinson St.
Doelger, W. E. P., *So. s.* 331 C'y
D'Oench, R. G., *Fr. s.* 19 Univ. Pl.
Doescher, W. O., *f.* 22 G C
Dolan, J. J., *Jr. a.* 131 H
Domoto, T., *Fr. s.* Nassau Inn
Donahue, T. H., Jr., *Jr. s.* 9 A H
Donald, G. D., *Jr. s.* 3 S E B
Donnelly, J. E., Jr., *So. s.* 5 Hill
Donohue, W. G. D., *q.* 112 Nassau St.
Dbolan, J. M., *Fr. a.* 43 Vandeventer Ave.
DOUGHERTY, G., *Instructor,* (13), 102 G C
Downey, R. A., Jr., *Fr. s.* 11 B
Downs, D., *Sr. a.* 4 W W
Doyle, H. N., *Fr. s.* 64 Wiggins St.
Draper, L. A., *Fr. s.* 4 E M W
Drennon, C. C., *Sr. s.* 351 C'y
Drews, T. W., *Fr. s.* 41 Vandeventer Ave.
Drummond, T. K., *Sr. s.* 112 L
Duane, H., *So. a.* 75 H
Ducas, R., *Sr. s.* 162 L
Duckworth, G. E., *So. a.* 12 N M R
Dudley, G. B., *Jr. a.* 1 U P
Duffendack, O. S., *f.* 29 Edwards Pl.
Duffield, D. C., *Fr. a.* 62 C
DUFFIELD, E. D., *Trustee,* South Orange, N. J.
DUFFIELD, G. V., *Circulation (Acting) and Shelves,* Univ. Library
DUFFIELD, H. G., *Treasurer,* (16), Stanhope Hall
DUGAN, R. S., *Professor,* (8), 16 Prospect Ave.
Dulles, W. W., *So. s.* 30 N E
Dulley, L. B., *Jr. s.* 61 '79 H
Duncan, A. J., *Fr. s.* 42 N E
Duncan, D. G., *So. a.* 47 No. Tulane St.
Duncan, J. E., *Jr. s.* 7 N W
Duncan, J. V., *Fr. s.* 15 Dickinson St.
Duncan, R. M., *Fr. a.* 5 N E
Duneka, H. J., *So. s.* 186 L
Dunham, R. J., Jr., *Fr. a.* 31 Univ. Pl.
Dunkak, W. H., *Sr. a.* 321 C'y
Dunlop, A. M., *Jr. s.* 73 B
Dunn, A., Jr., *Sr. a.* 309 H'm
Dunn, E. K., *Sr. a.* 61 P
Dunn, E. S., *Sr. a.* 5 W B
Dunn, J. F., *Sr. a.* 16 M D
Dunne, G. A., *So. s.* 14 U P
Dunnell, J., *So. s.* 2 D H
Dunning, R. G., *q.* 85 N E
DURLING, D. L., *Reader,* (16), G C
Duys, J. H., Jr., *Fr. s.* 9 M D
Dwight, W., *Fr. a.* 31 Univ. Pl.
Dyer, A. L., *Sr. ce.* 53 B
Dyer, W. G., *Fr. a.* 71 H
Dyson, J. M., *Fr. a.* 20 N E

Eastman, R. W., *Sr. s.* 5 N R
Eastmond, H. C., *So. s.* 37 S E
Eberhart, R. F., *Jr. s.* 163 L
Ecker, J. T., *Jr. a.* 4 W M W
Eckfeldt, E. H., Jr., *Sr. a.* 217 Nassau St.
Eddy, H. H., *Sr. a.* 8 S R
Eddy, W. A., *f.* Pelham Ave.
Edgar, C. P., *Sp.* 17 Madison St.
Edgar, J. B., *Fr. s.* 53 Univ. Pl.
Edgar, M. L., *g.* 24 Dickinson St.
Edgar, R. C., *Fr. a.* 82 Mercer St.
Egbert, D. D., *So. a.* 1 L P

Eilers, F. F., *q.* 25 Hill
Eisenbrey, J. K., *So. s.* 11 H
Eisenhart, L. P., *Professor,* (6), 25 Alexander St.
Elbow, C. W., Jr., *So. a.* 2 W W
Elderkin, G. W., *Associate Professor,* (9), The Bachelors
Elgin, C. P., *ee.* 50 Maple St.
Ellinger, E., Jr., *Fr. s.* 30 Mercer St.
Elliot, R. S., Jr., *Jr. a.* 26 C
Elliott, E. B., *Jr. a.* 52 Jefferson Rd.
Ellis, F. C., *Jr. a.* 31 '79 H
Ellis, M. J. M., *So. s.* 31 '79 H
Ellis, R. S., *So. s.* 9 S E B
Elsasser, A. R., *g.* 112 Mercer St.
Emeny, B., *So. a.* 6 S D
Emery, H. C., *So. s.* 171 L
Erdman, F. S., *So. s.* 6 S R
Engle, J. R., *Sr. a.* 6 N D
English, T. H., *g.* 78 G C
Eno, H. L., *Research Associate,* (12), 78 Stockton St.
Erdman, S., *Sr. s.* 111 H
Erickson, E. C., *Sr. s.* 3 C H
Ernst, L. L., *Fr. a.* 15 Madison St.
Etheridge, O. R., *Fr. s.* 30 Bank St.
Euston, A. H., *Fr. a.* 27 Jefferson Rd.
Euwer, P., *Jr. s.* 111 L
Evans, R. M., *Sr. s.* 21 H
Everett, M. R., Jr., *So. s.* 5 S R
Ewald, E. C., *Sr. a.* 54 C
Ewart, W. F., *q.* 21 Edwards Pl.
Ewing, J. K., 3rd, *So. a.* 11 H
Ewing, J. M., *Jr. a.* 68 B S
Ewing, R. M., *So. a.* 12 N M R

Faeth, P. E., *So. a.* 9 B
Fairchild, L. W., *So. s.* 90 Nassau St.
Faletti, S. L., *q.* 49 Park Pl.
Fall, J. H., III., *Fr. a.* 24 H'm
Farish, H. D., *Sr. s.* 32 Wiggins St.
Farish, W. W., Jr., *So. s.* 26 Hill
Farmer, J. A., *Fr. eng.* 28 Vandeventer Ave.
Farny, C., *Jr. a.* 186 L
Farr, M. S., *Assistant Professor,* (9), 20 Vandeventer Ave.
Farrand, B., *Consulting Landscape Gardener,* (14), New Haven, Conn.
Farrand, W., *Trustee,* South Orange, N. J.
Farrell, R. W., *Fr. a.* 49 Wiggins St.
Faulkner, R. V., *q.* 230 Nassau St.
Fay, E. B., *Sr. a.* 217 Nassau St.
Fearing, L. M., *So. a.* 6 Bank St.
Feiner, B. F., Jr., *Fr. s.* 28 Madison St.
Fell, D. B., *Sr. a.* 24 N E
Fentress, T. L., *So. a.* 10 Dickinson St.
Ferguson, R. G., *Jr. a.* 8 U P
Ferguson, R. R., *Fr. a.* 19 Bank St.
Ferlaino, F. R., *Sr. s.* 1 B
Ferris, W. R., Jr., *Fr. a.* 54 B
Fetter, F. A., *Professor,* (6), 121 Broadmead
Fetter, F. W., *g.* 92 G C
Fielding, G. P., *Fr. s.* 32 Vandeventer Ave.
Fierlein, J. B., *Sr. a.* 151 L
Fike, P. E. C., *So. a.* 4 N R
Find, J. T., *Jr. a.* 59 Wiggins St.
Findley, T. P., Jr., *Jr. a.* 81 B
Fine, H. B., *Dean of the Departments of Science,* (4), 200 Mercer St.
Fine, J. V., *Fr. a.* 4 E M W
Finnerty, P. K., *Fr. a.* 8 S W B
Finney, J. M. T., *Trustee,* Baltimore, Md.
Firestone, R. A., *So. a.* 183 L
Fischer, C. C., *So. s.* 18 E W
Fischer, W. H., *Fr. a.* 16 Madison St.
Fischler, H. A., *So. a.* 38 L
Fisher, A. M., *Jr. s.* 18 '79 H
Fisher, G. G., *Jr. s.* 64 B
Fisher, G. M., Jr., *Fr. a.* 15½ Chambers St.
Fisher, L. M., *Jr. a.* 211 C'y
Fisher, W. R., *f.* 120 Nassau St.
Fitch, H. R., *g.* 6 A G C
Fite, C. S., *Jr. a.* 31 N E
Fite, W., *Professor,* (7), 64 Nassau St.
Fitler, W. W., Jr., *So. s.* 90 Nassau St.

Fitzgibbon, W. F., *Fr. a.* 47 Univ. Pl.
Flanagan, N. A., *Fr. a.* 15 Dickinson St.
Fleece, C. L., *Assistant Professor,* (11), 45 Patton Ave.
Fleming, J. P., *Jr. a.* 36 P
Fleming, J. W., *Fr. a.* 47 Univ. Pl.
Fleming, M. C., *Trustee,* New York, N. Y.
Fleming, M. C., Jr., *Sr. a.* Ivy Club
Fleming, W. T., *Jr. s.* 15 C
Fletcher, H. M., *Instructor,* (14), 47 Spring St.
Flick, J. T., *So. ce.* 40 Vandeventer Ave.
Floan, A. E., *Sr. a.* 9 E B
Flowers, J. P., *So. s.* 115 B
Follis, R. G., *q.* 19 Univ. Pl.
Forbes, D. S., *Sr. a.* 16 S M R
Forbes, J. A., *Sr. s.* 24 B
Forbes, R. L., *Sr. s.* 23 P
Ford, H. J., *Professor,* (5), 44 Mercer St.
Ford, H. R., *Sr. s.* 43 B
Foreman, K. J., *g.* 95 Mercer St.
Foresman, A. M., *Fr. s.* 136 Nassau St.
Forgan, J. R., *Sr. a.* A B
Forgie, N. E., *Fr. s.* 32 P
Forman, J. N., *So. a.* 11 L P
Forrest, W. P., *Sr. a.* 6 E M W
Forstmann, R. H., *Jr. a.* 54 '79 H
Forsyth, G. H., Jr., *Jr. a.* 21 C
Fort, J. G., *Sr. a.* 3 A C
Fosbroke, H. E. W., Jr., *So. a.* 75 H
Foster, F. B., *Sr. s.* 2 W M W
Foster, G. S., *Jr. s.* 7 E M W
Foster, M., *So. s.* 32 H
Foster, W., *Professor,* (6), 41 Battle Rd.
Foth, F. E., *So. s.* 31 S E
Fowler, F. C., Jr., *q.*
Fox, A. E., *Assistant Professor,* (12), 47 Murray Pl.
Fox, F., *Jr. s.* 321 C'y
Fox, G. F., *So. s.* 10 W B
Fox, G. G., *g.* 101 G C
Fox, J. V., Jr., *So. a.* 4 A C
Fox, L., *Jr. a.* 64 '79 H
Fox, S., *Sr. a.* 42 '79 H
Frame, W. H., Jr., *Jr. s.* 61 B
Frank, C. H., *Fr. s.* 14½ Vandeventer Ave.
Frank, H., Jr., *Sr. a.* 104 H
Franklin, P. F., *Instructor,* (14), 24 Dickinson St.
Frazier, C. H., *Sr. s.* Charter Club
Freeman, A. L., *Fr. a.* 53 Univ. Pl.
Frelinghuysen, F., Jr., *So. a.* 75 H
French, A. T., Jr., *So. a.* 173 Nassau St.
Frieberg, A. E., *q.* 32 Hill
Friedlich, J. E., *Jr. a.* 442 C'y
Friend, A. M., Jr., *Instructor,* (14), 114 G C
Fritts, J. E., *So. a.* 18 L
Fritz, J. W., *Fr. a.* 19 Univ. Pl.
Froelich, J. D., *So. a.* 47 Univ. Pl.
Frois-Wittman, J., *Instructor.* (13), 124 G C
Fudge, D. G., *Fr. s.* 21 Chambers St.
Fudge, R. G., *Jr. ce.* 10 S D
Fuellhart, W. C., *Fr. a.* 19 Edwards Pl.
Fuldner, M. C., *Sr. a.* 3 Hill
Fulle, R. M., *Fr. s.* 14 W W
Fuller, J. A., *So. a.* 90 Nassau St.
Fuller, V. E. B., Jr., *Fr. a.* 29 Bank St.
Fullerton, G. J., Jr., *So. s.* 42 H
Funk, L. W., *Fr. a.* 110 Nassau St.
Furey, W. R., *Jr. a.* 21 B
Furman, N. H., *Assistant Professor,* (11), 61 Wiggins St.
Fyles, C. E., *Jr. s.* 34 B

Gable, H. C., *Sr. s.* 31 H
Galley, R. L., *So. a.* 34 C
Gaines, T. S., *Jr. s.* 132 H
Galban, J. S., *Fr. eng.* 53 Park Pl.
Gale, L. R., *Fr. a.* 15 Dickinson St.
Gale, R., *Jr. s.* 5 E W
Gilimpin, L., *Jr. ce.* 26 S E
Gambee, A. S., *So. a.* 41-51 P
Gardner, A., *Jr. a.* 232 C'y
Gardner, D. H. H., *q.* Nassau Inn
Gardner, D. L., *q.* 90 Nassau St.
Gardner, E. B., *Jr. a.* 3 B H
Garey, R. H., *So. s.* 1 D H'm
Garis, R. C., *q.* 21 Nassau Inn
Garland, G. F., *Fr. s.* 47 Univ. Pl.

GARRETT, R., *Trustee*, Baltimore Co., Md.
Garrick, H. F., *So. a.* 2 C H'm
Garrison, J., Jr., *Sp.* 80 Univ. Pl.
Garrity, M. H., Jr., *Sr. a.* 3 L P
Garside, C., *q.* 48 L
Gates, J. H., *q.* 41 Park Pl.
Gauger, A. W., *f.* 73 G C
GAUSS, C., *Professor*, (5), 106 Fitz Randolph Rd.
Gaver, J. M., *So. s.* 36 L
GEROULD, G. H., *Professor*, (7), 341 Nassau St.
Gerould, J. T., Librarian, (8), 55 Battle Rd.
Getze, E. B., Jr., *Sr. s.* 60 P
Gibbon, J. H., Jr., *Jr. a.* 43 '79 H
Gibbon, S. Y., *So. a.* 43 '79 H
Gibbs, G. F., Jr., *Jr. a.* 73 H
Gibson, J., Jr., *Jr. a.* 92 B
Gignilliat, L. R., Jr., *Sr. s.* Colonial Club
Gilbert, G., *So. ce.* 12 Chambers St.
Gilbert, W. K., *Fr. s.* 7 B
Gilfillan, A. B., *q.* 93 B
Gillespie, H. S., *Fr. s.* 15 S D
GILLESPIE, W., *Professor*, (6), 12 Bank St.
Gilmer, C. S., *Jr. a.* 71 Wiggins St.
Gilmore, L. G., *So. a.* 9 N R
Gilroy, R. C., *Jr. a.* 7 S D
Glass, G. F., *Jr. a.* Dial Lodge
Glave, G. B., *So. a.* 2 D H
Gleason, C. R., *Fr. a.* 311 H'm
Gleason, J. A., *So. a.* 1 L P
Glick, N., *Sr. s.* 2 E W
Glore, A. R., *So. a.* 19 Bank St.
Goddard, M., Jr., *Jr. a.* 12 U P
Godolphin, F. R. B., *So. a.* C E B
Goelz, C. G., *Jr. a.* 16 M D
Goeree, P. C. J., *g.* 35 B S
Golden, C. H., *Fr. a.* B W B
Gooch, H. W., *So. s.* 6 S E B
Goodbody, R., *Jr. s.* 3 W W
Goodman, B., Jr., *So. a.* 45 Hill
Goodner, S. M., *Sr. s.* 7 L P
Goodrich, H., *Jr. ce.* 106 P
Goodspeed, C. A., Jr., *Jr. a.* 9 L P
Goodwin, E. M., *Jr. a.* 8 N W
Goodwin, H. S., *So. a.* 11 S W B
Goodwin, L. M., *So. a.* 144 C'y
Goodwin, R. H., *Fr. a.* 53 Univ. Pl.
Gordon, H. L., *Fr. s.* Nassau Inn
Gordon, J. W., *So. a.* 38 Wiggins St.
Gordon, L., Jr., *Sr. s.* 101 B
Gordon, L. A., *g.* 84 A S
Gorman, J. P., *Jr. s.* 10 L P
GORTATOWSKY, C., *Assistant*, (15), 11 C G C
Gotshalk, D. W., *Sr. a.* 5 A C
Gould, E. W., Jr., *Sr. s.* Ivy Club
Gower, W. M., *Fr. a.* 12 S W B
Graeser, A. O., *So. s.* 24 Madison St.
Graf, C. E., *g.* 17 Olden St.
Graham, B. B., *So. a.* 103 H
GRAHAM, F. D., *Assistant Professor*, (12), 64 Nassau St.
Graham, J. A., g. 112 G C
Graham, R. W., Jr., *Jr. a.* 103 H
Grange, H. K., *So. s.* 30 S E
Grant, J. W., Jr., *So. s.* 72 H
Grauer, F. H., *So. a.* 4 S W B
Graves, C. C., *So. a.* 12 H'm
Gray, A. B., *Fr. s.* 25 Chambers St.
GRAY, C. W., *Instructor*, (14), 2 B G C
Gray, E. W. T., Jr., *Fr. s.* 14 Madison St.
Gray, H. K., *Jr. s.* 85 P
Gray, J. A. C., *Jr. a.* 102 P
Gray, R. T., *Fr. a.* 27 Vandeventer Ave.
GREEN, E., *Guyot Hall Library*, Guyot Hall
Green, E. D., *Fr. s.* 19 Bank St.
Green, E. M., Jr., *Fr. s.* 122 Moore St.
GREEN, H. W., *Trustee*, Trenton, N. J.
GREEN, J. C., *Assistant Professor*, (11), 321 Nassau St.
Green, M. A., *Jr. a.* 1 A C
Green, T. M., Jr., *So. a.* 124 H
Green, W. E., *Fr. eng.* 19 Edwards Pl.
Greene, A. M., Jr.,
Greene, B. A., Jr., *Fr. a.* 28 Vandeventer Ave.
Greey, E. A., *So. ce.* R. F. D. 3
Gregory, F. M., *So. a.* 199 Nassau St.
Gresh, P. H., *Jr. s.* 34 C
Griffin, D. W., *Jr. s.* 5 S W B
Griffin, P. F., *Sr. a.* 43-53 P

Griffith, R. G., *Fr. s.* 15½ Chambers St.
Grimes, M. B., *Fr. a.* 42 Hill
Grisemer, W., *f.* 15 C G C
Grogan, W. H., *Sr. a.* 88 B
Gross, A. P., *Fr. a.* 16 Edwards Pl.
Gross, H., *Infirmarian,* (16), McCosh Infirmary
Grosset, A. D., *So. a.* 2 U P
Groth, G. H., *Fr. a.* 3 M D
Grubb, A. O., *Fr. a.* 34 Bank St.
Grubbs, H. A., Jr., *Jr. a.* 13 N M R
Grummon, S. E., *Jr. a.* 34 P
Gulick, J. H., *Jr. ce.* 9 L P
Gulick, R. A., *Fr. a.* 11 Vandeventer Ave.
Guthrie, H. B., Jr., *So a.* 2 B C
Gwathmey, C. B., Jr., *Jr. a.* 12 M D

Hackney, H. H., *Sr. a.* 43 P
Haefeli, W., Jr., *Fr. a.* 9 Madison St.
Hale, C., Jr., *Sr. a.* 5 B
Hale, W. E., *Sr. a.* 42-52 P
Hall, A. P., *Sr. a.* 15 B
Hall, C. R., *Assistant Professor.* (10), 152 G C
Hall, R. T., *q.* 41 Park Pl.
Hall, W. P., *Assistant Professor,* (10), 363 C'y
Hall, W. W., Jr., *Fr. a.* 15 Univ. Pl.
Hallsted, R. D., *Jr. a.* 172 Nassau St.
Halsey, E. P., *So. a.* 21 Chambers St.
Ham, M. L., *Fr. s.* 15 Dickinson St.
Hamill, J. F., *Fr. a.* 28 Vandeventer Ave.
Hamilton, A. K., *Jr. a.* 310 H'm
Hamilton, C. R., *g.* 29 Alexander St.
Hamilton, G. B., *Fr. s.* 9 Park Pl.
Hamilton, R. P., *So. a.* 71 B
Hamilton, S. W., *Jr. a.* 311 C'y
Hamlin, J. F., *Fr. s.* 29 Bank St.
Hammer, V. J., *q.* 25 Bank St.
Hammond, B. R., *Fr. a.* 25 Chambers St.
Handler, C., *Sr. a.* Nassau Inn
Handy, P. D., *Trustee,* New York, N. Y.
Hanna, W. M., *q.* 59 Tulane St.
Hansen, M. C., *So. a.* 8 N M R
Harbert, J. C., *Jr. a.* 5 W M W
Hardin, A. S., *Jr. a.* 5 E M W
Hardin, M. D., Jr., *Fr. a.* 5 E M W
Hardin, P. C., *Sr. a.* 5 E M W
Harding, D. D. B., *Fr. s.* 143 L
Hardy, C. D., *Fr. s.* 80 Mercer St.
Hardy, G., *Jr. a.* 62 '79 H
Hargroves, V. C., *Sr. a.* 88 Jefferson Rd.
Harlan, R. J., *q.* 16 Stockton St.
Harper, G. M., *Professor,* (4), 36 Mercer St.
Harris, S. E., *Instructor,* (14), 6 A G C
Harris, W. B., *Professor,* (4), Greenholm
Harrison, E. P. H., Jr., *Sr. a.* 59 Wiggins St.
Harrison, S. E., *Jr. s.* 3 B H
Hart, H. C., *Sr. a.* 241 C'y
Hart, P. R., *q.* 32 Wiggins St.
Hart, T. J., *q.* 7 N D
Hart, H. C. P., *g.* 142 G C
Hartshorn, W. W., *q.* 13 E W
Harvey, B. B., *Fr. a.* 106 H
Harvey, E. N., *Professor,* (8), 41 Jefferson Rd.
Harvey, H. A., *Sr. ce.* 15 S W
Harvey, J. C., *q.* 19 Madison St
Haselton, N. S., *Fr. a.* 46 Hill
Hassler, C. V., *g.* Benham Club
Hastings, W. S., *Instructor,* (13), 17 Edwards Pl.
Hatch, A. B., Jr., *Fr. a.* 16 Bank St.
Hatfield, J. S., *So. a.* 90 Nassau St.
Hathaway, C., *Jr. a.* 10 S E
Haupt, H. C., *Jr. s.* 62 '79 H
Hauschild, K., *Fr. a.* 11 Alexander St.
Havell, G. F., *Jr. s.* 35 P
Haven, M. D., *So. a.* 21 Chambers St.
Havens, P. S., *Fr. a.* 17 N E
Hawk, J. G., *q.* 23 William St.
Hawke, W. B., *Sr. a.* 11 S W
Hawkins, W. M., *So. a.* 28 Vandeventer Ave.

Hawley, R. B., *Fr. a.*
16 Madison St.
Hayden, J. H., Jr., *Fr. a.*
21 Chambers St.
Hayes, R. S., *Fr. s.* 89 S E
Hayes, W. C., Jr., *So. a.* 42 C
Haym, L. H., Jr., *Fr. a.*
10 Dickinson St.
Hazlet, H., 2nd., *Fr. s.* 68 L
Healy, A. K., *g.*
36 Vandeventer Ave.
HEERMANCE, R., *Assistant Professor,* (10), 298 Nassau St.
Held, J. S. H., *So. a.* 61 H
Heller, E. S., *Sr. a.* 16 Edwards Pl.
Helliwell, C. H., *Jr. a.* 32 N E
HELM, M., *Reader,* (16), 156 G C
Helm, N., *Fr. a.* 58 Wiggins St.
Helmick, P. S., *f.*
46 Vandeventer Ave.
Hemminger, C. E. H., *Fr. s.*
11 S E B
Hemphill, H. J., *So. a.*
34 Vandeventer Ave.
Hencken, H. O., *So. a.* 35 Univ. Pl.
HENDEL, C. W., Jr., *Assistant Professor,* (11), 76 Murray Pl.
Henderson, B. H., *Sr. a.* 104 P
Henderson, R. L., *Sr. a.* 351 C'y
Henderson, W. S., *Fr. a.*
21 Chambers St.
Hendren, J. W., *Fr. a.* 23 Bank St.
Henkel, M. V., *Fr. s.* 311 H'm
HENRY, B., *Trustee,*
Philadelphia, Pa.
Henry, W. L., *Jr. s.* 81 P
Hensel, H. S., *Sr. a.* 3 A H'm
Herben, S. J., Jr., *g.* Pelham Ave.
Herndon, H. V., *Jr. a.* 311 C'y
Herrlich, W. E., *Jr. s.* 15 E W
Herzog, E. R., *Fr. a.*
28 Vandeventer Ave.
Hess, J. J., *Sr. a.* 51 L
Hess, O. T., *Fr. a.* 53 Univ. Pl.
Hessberg, E. K., *So. s.*
21 Edwards Pl.
Hewitt, T., *Sr. a.* 31 A S
Hewitt, W. W., *Sr. a.*
Campus Club
HEYL, L., *Head Aquisitions Dept.,* (15), Lawrenceville, N. J.
Heyn, E. V., *Fr. a.* Lavake Pl.
Hibbard, W. G., *Fr. s.* 31 Univ. Pl.
HIBBEN, J. G., *President,* (3), Prospect
Hicks, L. W., Jr., *Fr. s.*
14 Edwards Pl.
Hicks, T. E., Jr., *Sr. a.* 322 C'y
Higley, P. H., *Sr. a.* 116 B
Hilgartner, H. L., Jr., *Jr. a.*
12 M D
Hill, W. R., Jr., *Fr. s.* 71 P
Hillhouse, J. N., *Par.*
Princeton Theo. Sem.
Hilliard, J. B., *So. s.* 51 H
Hills, C. B., *Sr. s.* 112 B
Hills, R. G., *Fr. s.* 300 H'm
Hilsman, A. H., *g.* 27 Edwards Pl.
Hilyard, S. B., *Fr. s.* 15 S D
Hinchman, T. H., Jr., *Fr. s.*
19 Olden St.
Hinds, A. E., *g.* 41 G C
Hitzrot, H. W., *So. s.* 41-51 P
Hobbs, R. H., *So. s.* 32 Mercer St.
Hobson, J. B., *Jr. ce.* 182 L
Hodges, H. L., *So. a.* 84 L
Hoff, A. W. B., *Fr. s.* 109 P
Hoffman, H. L., *g.* 20 A S
Hoffman, W. G., III, *Jr. s.* 78 P
Hoflus, F. L., *Fr. s.* 15 Univ. Pl.
Hogue, B. J., *So. a.* 17 S W
Hole, W. E., *Sr. a.* 2 S E B
Hollander, G. C., *Sr. a.* 141 C'y
Hollenberg, H. G., *So. s.* 421 C'y
Holm-Smith, A., *So. a.*
21 Chambers St.
Holmes, E., *Sr. s.* 19 N W
Holmes, L. G., *q,* 5 W B
Holsen, J. N., *f.* 15 A G C
Hood, H. A., *g.* 5 Greenview Ave.
Hooper, R. P., Jr., *Sr. a.* 83 P
Hoornbeek, J. C., *Jr. a.* 101 L
Hope, G. A., *g.* 8 B G C
HOPE, W., *Trustee,*
New York, N. Y.
Hope, W. K., *Fr. a.* 71 P
Hopkin, C. E., *Sr. a.* 26 M D
Hopkins, J. M., *Jr. a.* 83 P
Hopkins, W. C., *Jr. s.* 11 S W
Hopkinson, J. N., *So. s.* 2 A H
Horovitz, J. I., *Fr. a.*
43 Jefferson Rd.
HORR, R. J., *Assistant Professor,* (11), Nassau Club
Horsfield, G. M., *Jr. a.*
16 Vandeventer Ave

Horton, A. W., Jr., *ee.* 54 G C
Horton, G. P., *Fr. s.* 10 Moore St.
Hoskins, J. P., *Professor,* (7), 22 Bank St.
Hotchkin, A. H., *Sr. a.* 24 P
Hotelling, H., *f.* 28 Linden Lane
Hovenden, T. H., *Jr. a.* 163 Nassau St.
Howard, A. F., *Fr. s.* 11 E B
Howard, F. M., *Jr. a.* 111 B
Howard, H. C., *Assistant,* (15), 24 G C
Howard, J. E., *So. a.* 43 H
Howard, S. E., *Assistant Professor,* (10), 35 Jefferson Rd.
Howe, S. J., *Instructor,* (12), 80 Univ. Pl.
Howell, B. F., *Assistant Professor,* (11), 54 Patton Ave.
Howland, W. S., *Jr. a.* 11 N D
Hubbell, W. B., *So. a.* 6 N W
Huhn, T., *Jr. s.* 3 L P
Hulett, G. A., *Professor,* (6), 44 Washington Rd.
Hull, J. B., Jr., *Fr. a.* 19 Univ. Pl.
Humphreys, D., *So. a.* 4 Hill
Humphreys, H. L., *f.* 32 G C
Hungerford, C., *Sr. ce.* 33 L
Hungerford, L. P., *Jr. s.* 112 H
Hunt, G. A., *q.* 71 Wiggins St.
Hunt, T. W., *Professor,* (3), 72 Library Pl.
Hunter, H. V., *Fr. a.* 10 Bayard Lane
Hunter, R. C., *Fr. s.* 20 W W
Huntington, T. L., *Fr. a.* 20 Bank St.
Hurd, F. L., *Pliny Fisk Library,* University Library
Hurditch, P. R. R., *Fr. s.* 31 Univ. Pl.
Hurst, W. B., Jr., *Sr. s.* 138 Nassau St.
Huss, H. C. O., *Professor,* (3), Absent
Hussey, J. U., Jr., *Jr. a.* 162 L
Hutchinson, J. B., *Sr. s.* 8 B H
Hutchison, R. C., *Par.,* 36 A S
Hutson, F. L., *Registrar,* (8), 42 Cleveland Lane
Hutt, J. R., *Fr. a.* 19 M D
Hyde, B. W., *q.* 90 Nassau St.
Hynson, R. C., *Fr. a.* 14 Park Pl.

Imhoff, R. E., *Jr. s.* 18 S W
Ingersoll, J. H. W., *Sr. s.* U P
Ingholt, H., *f.* 7 A G C
Innes, B. M., *So. a.* 3 B H'm
Iredell, H. H., *Sr. s.* 25 C
Irons, H. C., Jr., *Sr. a.* 154 L
Irons, W. G., 2nd., *Sr. a.* 141 L
Irvine, L. V., *Fr. a.* 8 N R
Irwin, S. B., *Sr. a.* 102 B
Isarankura, P., *ee.* 15 E G C
Ives, J. O., *Fr. a.* 19 E W
Ives, L. T., *Fr. s.* 11 Alex. St.

Jackson, A., *Fr. a.* 58 Univ. Pl.
Jackson, A. B., *Sr. a.* 22 H'm
Jackson, C. D., *So. a.* 35 Univ. Pl.
Jackson, C. T., *Jr. a.* 13 P
Jackson, J. N., *Fr. a.* 19 Univ. Pl.
Jackson, R. J., *Sr. a.* 332 C'y
Jackson, S. A., *g.* 21 G C
Jackson, S. B., *Sr. a.* 66 Wash. Rd.
Jackson, W. H., *So. a.* 11 C
Jackson, W. R., *Fr. s.* 19 Univ. Pl.
Jacob, H. A., *So. s.* 24 Hill
Jacobs, J. S., *Fr. a.* 164 Nassau St.
Jacobsen, O. P., *So. s.* 124 L
Jacobus, M. W., *Trustee,* Hartford, Conn.
Jaeger, G. J., Jr., *Jr. s.* 42 B
James, D. R., III, *So. a.* 90 Nassau St.
James, W., Jr., *So. a.* 3 B
James, W. F., *f.* 91 G C
James, W. R., *Jr. a.* 3 S E B
Jamieson, T. C., *q.* 2 C H
Jarrell, A. J., Jr., *Sr. a.* Campus Club
Jefferies, J. H., Jr., *Jr. a.* 30 P
Jenkins, W. I., *q.* 23 William St.
Jenney, J. L. K., *Fr. s.* 19 Univ. Pl.
Jennings, C. M., *Jr. s.* 4 E W
Jessup, J. P., *Fr. s.* 16 Bank St.
Jett, R. S., *Sr. s.* 24 L
Jewett, J. H., *Jr. a.* 62 H
Jiraněk, L. A., *Sr. ce.* 62 P
Joffrion, W. K., *Jr. a.* 64 '79 H
Johns, J., *So. a.* 6 Bank St.
Johnson, A. C., *Assistant Professor,* (10), 37 Bank St.
Johnson, C. P., *Instructor,* (14), 36 Univ. Pl.
Johnson, G. L., Jr., *Jr. a.* 21 L

Johnson, J. W., *Jr. s.*
23 William St.
JOHNSON, R. B. C., *Professor*, (6),
129 Broadmead
Johnson, R. G., *q.* 46 Spring St.
Johnson, R. G., *Fr. a.*
11 Madison St.
Johnson, R. L., *Sr. a.* 16 B
Johnson, W. C., Jr., *Fr. s.*
166 Nassau St.
Johnson, W. M., Jr., *So. a.*
90 Nassau St.
Johnson, W. V., *Sr. a.* 31 P
Johnston, G., *Jr. s.* 51 '79 H
Jones, H. A., *g.* 24 G C
Jones, J. M., *Jr. ce.*
17 Edwards Pl.
JONES, L. W., *Professor*, (8),
Peacock Inn
Jones, L. W., *Sr. a.* 42 P
Jones, R. C., *Jr. s.* 343 C'y
Jones, R. H., *So. a.* 172 Nassau St.
Jordan, R. H., *Jr. s.* 23 '79 H
Joseph, J. B., *Fr. s.* 9 W B
Joyce, C. S., *Fr. a.* 15 Madison St.
Joyce, M. D., *So. s.* 54 L
Juhring, J. C., Jr., *So. s.*
35 Univ. Pl.

Kabet, A., *Jr. a.* 21 S E
Kadetsky, A. B., *q.* 215 Nassau St.
Kahlo, G. D., *So. s.*
21 Chambers St.
Kaighn, G. S., Jr., *Jr. a.* 2 M D
Kaltenbach, H. J., Jr., *Sr. a.*
22 H'm
Kane, E. K., Jr., *Sr. s.* 2 M D
Karr, E. R., *So. a.* 2 Nassau St.
Kavanagh, J. O., *Jr. s.* 51 '79 H
Keating, T. J., Jr., *Sr. s.* 5 S W B
Keck, J. S., *Sr. s.* Elm Club
Keech, G. G. W., *Jr. s.* 32 C
Keech, J. G., *So. a.* 18 M D
Keener, J. D., *Fr. a.* 41 N E
Keeney, M., *Sr. a.* 63 P
Keeney, R. B., *So. a.* 54 L
Kehler, S. W., *Fr. a.*
39 Wiggins St.
Keith, R. W., *Fr. a.* 19 M D
Keith, S., *So. a.* 32 H
Kelby, R. H., III., *Fr. a.* 312 C'y
Kelley, R. A., *Jr. a.* 108 P
Kelley, D. S., *Jr. s.*
33 First Nat. Bank
Kelley, E. B., *Sp.* 51 C
Kelly, G. A., *So. a.* 305 H'm
Kelsey, A. W., *Sr. s.* 32 B
Kelsey, G. N., *Fr. a.*
136 Nassau St.
Kemble, W., *Fr. a.* 32 Mercer St.
KEMMERER, E. W., *Professor*, (7),
128 Fitz Randolph Rd.
Kemp, J. H., *Jr. s.* 41 '79 H
Kendall, D. W., *So. a.* 1 C H'm
Kennan, G. F., *Fr. a.*
58 Wiggins St.
Kennedy, A., Jr., *Fr. s.* 12 S M R
KENNEDY, C. W., *Professor*, (8),
66 Battle Rd.
Kennedy, G. H., *So. a.* 3 E B
Kennedy, M. C., Jr., *Jr. s.* 251 C'y
Kennedy, M. H., *Sr. a.* 4 W B
KENNEDY, R. J., *Instructor*, (14),
G C
Kent, W. R., *Sr. a.* 171 L
Kenworthy, N. A., *Sr. ce.* 451 C'y
Kern, W. C., *q.* 47 Park Pl.
Kerney, T. L., *So. s.* 41 C
Kerper, E. K., *Fr. a.*
15 Univ. Pl.
KERR, W. F., *Assistant to the Registrar*, (16), 209 Nassau Hall
Kerr, W. K., *Fr. s.* 6 B
Ketchum, S. P., *So. s.* 16 L P
Keyes, A. J., *g.* 7 A G C
Kilgus, E. O., *Sr. s.* 5 A H
Kimball, H. H., *So. a.*
38 Wiggins St.
Kimball, H. M. H., *Jr. s.* 352 C'y
King, C. B., *q.* Nassau Inn
King, E. S., *Sr. a.* 3 S D
King, H. G., *Sr. s.* 84 B
Kingham, J. G., *Fr. s.* 95 P
Kingsley, W. J., *Sr. a.* 12 W B
Kinnear, E. R., *Sr. s.* 28 C
Kinney, F. C., *So. a.* 18 Bank St.
Kirby, D. R., *Fr. s.* 63 H
Kirk, J. S., *Fr. s.* 14 W W
Kirk, R., *Sr. a.* 18 S D
Kirkland, H. B., *So. a.* 9 N W
Kirkpatrick, A., *Jr. a.* 17 S W
Kirkpatrick, T., *So. a.* 18 A H
KISSAM, P., *Instructor*, (14), G C
Klaess, J. J., *So. a.*
40 Vandeventer Ave.

Kleinhaus, L. C., *Fr. s.* 12 Park Pl.
Kleinman, M., *Jr. a.* 6 N M R
Klipstein, K. H., *Sp.* 21 P
Kloman, F. R., *Fr. a.* 11 Dickinson St.
Klumpp, T. G., *So. s.* 11 N M R
Knapp, S. R., 3rd., *Fr. s.* 12 Princeton Ave.
Kneedler, H. M., Jr., *Fr. a.* 211 C'y
Kneedler, W. H., *Sr. a.* 6 N D
Knepper, F. T., *Sr. a.* 12 B
Knepper, R. E., *Jr. a.* 12 B
Knight, H. L., *Fr. a.* 6 B
Knight, P. O., Jr., *Fr. a.* 15 Univ. Pl.
Knowles, G. M., *Sr. s.* 6 E M W
Koetter, C. E., *Jr. s.* 34 Bank St.
Konter, E. F., *Fr. a.* 29 Bank St.
Kopf, C. H., *Fr. s.* 51 Park Pl.
Koren, W., *Assistant Professor*, (9), 105 Fitz Randolph Rd.
Koth, H. B., *Sr. s.* 7 A H
Koven, W. P., *So. s.* 34 Hill
Kraft, G. J., *g.* 25 Chambers St.
Kretschmann, P. M., *f.* 128 G C
Kuhn, J. M., *Fr. a.* 8 S W B
Kunkel, L. S., *So. a.* 66 Nassau St.
Kuntz, J. E., *Fr. a.* 31 Univ. Pl.
Kurth, E. H., *g.* 15 A G C
Kurzrok, H. B., *Fr. s.* 2 Nassau St.
Kuser, R. V., Jr., *So. ce.* 268 C'y
Kushner, F. S., *Jr. a.* 14 N M R
Kydd, D. M., *So. s.* 15 N W

LaBranche, G. M. L., Jr., *Sr. a.* 24 B
Lacey, G. H. P., *So. a.* 90 Nassau St.
Lackey, V. M., *Fr. s.* 14 H'm
Lafferty, E. B., *Fr. a.* 43 Jefferson Rd.
Laflin, L. E., *Curator of the Cook Chess Collection*, University Library
Laflin, L. E., Jr., *Sr. a.* 95 B
Laidlaw, R. W., *So. a.* 6 N W
Lamar, N. D., *So. s.* 6 S E B
Lamb, D. S., *Jr. s.* 8 Madison St.
Lambert, A. G., *Sr. a.* 101 B
Lane, M. R., *Jr. a.* 7 L P
Lane, N. T., *Sr. a.* Ocean Grove, N. J.
Lane, R. H., Jr., *Fr. a.* 15 W W
Lane, W. J., *Fr. a.* 9 W B
Lanier, S., *So. s.* 21 H'm
Larrabee, W. M., *Fr. s.* 58 Wiggins St.
Latta, C. H., Jr., *So. a.* 42 L
Latta, J., *So. a.* 42 L
Lauer, W. L., *Sr. s.* 2 M D
Lauster, C. F., *Jr. a.* 52 Jefferson Rd.
Lawson, A. E., *q.* 32 Wiggins St.
Lawson, R., *Sr. s.* 14 B
Leach, H. S., *Reference Librarian*, (12), 122 G C
Leber, C. T., *g.* 117 H S
Ledbetter, W. C., *Jr. s.* 12 C
Lee, A. F., *Fr. s.* 27 Edwards Pl.
Lee, C. E., *So. s.* 8 Hill
Lee, H. D., *q.* 2 Nassau St.
Lee, J. P., *Fr. a.* 8 W M W
Lee, L. C., Jr., *Fr. a.* 66 Nassau St.
Lee, R. H., *Fr. s.* 34 S E
Lee, R. H., *q.* 21 Chambers St.
Lee, R. W., *g.* 8 A G C
Lee, R. W., Jr., *q.* 25 Edwards Pl.
Lee, W. S., Jr., *So. ce.* 9 W M W
Leeming, L. B., *So. a.* 82 B
Leh, G. E., *So. a.* 41-51 P
Lehnert, D. F., *Jr. ce.* 6 E B
Leigh, E. G., III, *Fr. a.* 90 Nassau St.
Leitch, A., *So. a.* 10 N M R
Lembcke, E. N., *Fr. a.* P
Lemen, J. H., *Fr. s.* 19 S M R
Lenon, W. E., *Jr. s.* 230 Nassau St.
Leon, J. H., *Sr. s.* 36 L
LeRoy, J. M., *Jr. a.* 66 H
Lesser, H. A., *Fr. s.* 9 Madison St.
Lester, H. B., *So. a.* 2 L P
Levengood, S. L., *f.* 7 B G C
Levin, E. H., *Fr. s.* 32 Mercer St.
Levin, M. A., *Jr. a.* 7 S E
LeViness, C. T., 3rd, *Jr. a.* 106 P
Levis, R. T., *Jr. a.* 4 E B
Lewis, C. H., II, *Jr. a.* 66 H
Lewis, H. H. W., *Fr. a.* 28 Bank St.
Lewis, H. N., *Fr. s.* 14 Bank St.
Lewis, H. R., *Jr. s.* 5 S D
Lewis, J. B., *Sr. s.* 70 P

Lewis, P. J., Jr., *Fr. a.* 10 Bayard Lane
Lewis, R. G., *So. s.* 68 L
Lewis, R. W., Jr., *So. s.* 142 C'y
Leyburn, J. G., *f.* 92 G C
Libbey, W., *Professor,* (8), Thanet Lodge
Liebes, S., Jr., *So. s.* 11 N E
Lindabury, A. H., *So. a.* 22 N E
Liebman, H., *So. a.* 56 C
Lionberger, A. D., *So. a.* 10 E W
Lipscomb, L. W., *So. a.* 111 L
Little, E. R., *Fr. a.* 91 B
Little, F. R., *Sr. a.* 308 H'm
Little, H., Jr., *g.* 44 A S
Little, S. K., *So. a.* 182 L
Littlehales, G. R., *Jr. s.* 52 L
Liu, C. F., *g.* 36 B S
Livingood, J. J., *Fr. a.* 12 S E B
Livesay, J. B., *g.* 213 H S
Livingston, J. S., *Sr. a.* 16 L
Lloyd, E. G. R., *Fr. s.* 19 Univ. Pl.
Lloyd, H. G., Jr., *Jr. a.* 52 C
Lloyd-Smith, P., *So. a.* 42 C
Loeb, A. F., *So. s.* 12½ Vandeventer Ave.
Loehlin, C. H., *g.* 217 H S
Loetscher, L. A., *Fr. a.* 13 S E
Logan, V. W., *Jr. a.* 2 E M W
Long, L. J., Jr., *Jr. s.* 141 H
Long, R. S., *So. a.* 20 M D
Long, R. T., *Fr. s.* 44 Vandeventer Ave.
Long, S., *So. a.* 3 W B
Longwell, B. E., Jr., *q.* 19 Univ. Pl.
Longwell, H. C., *Associate Professor,* (9), 91 Mercer St.
Loomis, E. H., *Professor,* (4), 302 Nassau St.
Loos, G. W., Jr., *Sr. a.* 26 M D
Lourie, D. B., *Sr. a.* 181 L
Love, G. H., *Sr. a.* 181 L
Love, W. E., *Sr. a.* 181 L
Lowe, A. B., *Jr. a.* 3 U P
Lowe, J. B., *Jr. a.* 3 U P
Lowe, L. F. H., *Instructor,* (14), 43 G C
Lubin, T., *So. a.* 4 S E
Lucas, A. F., *Instructor,* (13), P. O. Box 311
Ludlum, A., *Fr. a.* 34 Vandeventer Ave.
Luke, J. G., *Fr. s.* 41 Hill
Lukens, C. P., Jr., *Sr. a.* 65 B
Lukens, J. N., *Fr. a.* 1 S E B
Lum, P. S., *q.* 65 Wiggins St.
Luquer, E. P., *Jr. s.* 11 P
Lynch, J. H., Jr., *Sr. a.* B S
Lyon, J. P., *Sr. a.* 34 '79 H
Lyon, Q. M., *g.* 39 B S

MacAdams, H. B., *Fr. s.* 44 C
McAlpin, D. M., *Jr. a.* 42 L
McAlpin, T. M., *Fr. a.* 95 P
Macbeth, M., *q.* 10 Bayard Lane
McBride, W. P., *Sr. s.* 184 L
McCabe, D. A., *Professor,* (8), 243 C'y
McCaddon, S. G., *So. s.* 352 C'y
McCamant, T., *Sr. a.* 18 M D
McCarter, T. N., Jr., *Sr. a.* 22 C
McCarthy, E., *So. a.* 12 Chambers St.
McCarthy, F. A., *Sr. a.* 52 H
McCartney, H. Y., *Jr. a.* 14 P
McCarty, W. C., *Fr. a.* 47 Univ. Pl.
McCaull, R. M., *Jr. a.* 7 N D
McCay, L. W., *Professor,* (4), 12 Morven St.
McClain, B., *Jr. s.* 7 E M W
McClellan, A. L., Jr., *Fr. a.* 11 E W
McClellan, G. B., *Professor,* (7), Battle Rd.
McClenahan, H., *Dean of the College,* (5), Joseph Henry House, College Pl.
McClenahan, J. M., *Sr. a.* 12 S W
McClenahan, R. L., *Fr. a.* Joseph Henry House
McClenahan, R. W., *So. s.* 8 C H
McClintock, F. T., *Fr. s.* 136 Nassau St.
McCloskey, J. J., Jr., *So. a.* 27 William St.
McClure, C. F. W., *Professor,* (4), 12 Morven St.
McComas, H. C., *Associate Professor,* (9), 109 Broadmead
McConaughy, N. U., *g.* 30 A S
McConnell, D. H., Jr., *q.* 46 Spring St.
McConnell, J. W., *Fr. a.* 55 Jefferson Rd.
McCord, R. F., *Sr. s.* 18 B

McCormick, C. H., *Trustee,* Chicago, Ill.
McCormick, G., *g.* Pyne Tower, G C
McCoy, J. F., Jr., *Sr. a.* 8 C H'm
McCracken, W. H., *q.* 26 Bank St.
MacCready, W. B., *Sr. a.* 10 W M W
McCreery, R. C., *Fr. s.* 47 Univ. Pl.
McCune, G., *g.* 21 G C
McDavid, A. J., *Assistant,* (15), 52 G C
McDermand, F. R., Jr., *So. a.* 8 Hill
McDonald, A. D., *Sr. a.* 242 C'y
Macdonald, A. H., *So. a.* 10 Dickinson St.
MacDonald, F. C., *Associate Professor,* (9), Nassau Inn
Macdonald, G., *Jr. s.* 221 C'y
MacDonald, J. C. E., *Fr. a.* 11 Dickinson St.
MacDonald, J. F., *So. s.* 36 L
McDougal, W., *Fr. eng.* 66 Nassau St.
MacDougall, R. G., *Sr. a.* 32 B
MacDuffee, C. C., *Instructor,* (14), 26 Murray Pl.
McEachin, T. C., Jr., *Sr. a.* 133 L
McEldowney, W. M., *So. s.* 90 Nassau St.
McElroy, R., *Professor,* (6), 25 Bayard Lane
McFerran, W. B., *Sr. a.* 14 H'm
McGean, J. P., *Fr. s.* 12 Chambers St.
McGee, A. V., *Fr. a.* 5 Madison St.
McGrann, B. P. G., *So. s.* 212 C'y
McIlvaine, W. B., Jr., *Sr. a.* 32 '79 H
McIlwain, G. I., *Sr. a.* 23 B
MacInnes, C. R., *Associate Professor,* (9), 12 Vandeventer Ave.
MacInnis, D. S., *g.* 109 H S
McJunkin, E. K., *Sr. s.* 10 N D
Mack, L. A., *Fr. a.* 74 B
Mackay, C. A., *g.* 44 G C
MacKay, R. A., *f.* 2 A G C
McKee, D. R., *q.* 57 Univ. Pl.
McKee, J. D., *Jr. a.* 7 W M W
McKeehan, W. C., Jr., *q.* 28 Vandeventer Ave.
McKelvy, A. D., *So. s.* 25 P
McKenna, N. A., *Jr. a.* 263 C'y
McKenney, J., *Jr. s.* 73 P
McKernon, J. W., *Fr. a.* 22 Vandeventer Ave.
McKim, C. R., *So. s.* 11 M D
McKinley, R. B., *Fr. s.* 22 M D
MacKinney, J. R., *Jr. s.* 13 L
Mackinnon, D. G., *Fr. a.* 18 Madison St.
McKnight, F. H., *Sr. a.* 8 B H
McLanahan, S., *Jr. a.* 12 N W
McLaren, C. F., *q.* 23 William St.
MacLaren, M., *Professor,* (5), 38 Washington Rd.
MacLaren, M., Jr., *Jr. a.* 91 H
McLaughlin, R., *g.* 10 B G C
McLean, E. O., *Jr. a.* 97 B
McLean, M. M., *Jr. s.* 2 W M W
McLean, W. P., *Sp.* L P
McLeod, R. C., *Fr. s.* 53 L
McMahon, H. E., *Fr. s.* 10 E B
McMahon, J. E., *Professor,* (8), 152 Nassau St.
McMaster, A. D., *Fr. a.* 33 P
McMillan, A., *Sr. ce.* 3 A H'm
McMillan, C., *Professor,* (3), 40 Bayard Lane
MacMillan, E. A., *Superintendent of Grounds and Buildings,* (16), Stanhope Hall
McMillan, E. L., *Fr. s.* 34 Vandeventer Ave.
McNamara, T. H., *Sr. s.* Cannon Club
McNaugher, D. W., Jr., *Fr. a.* 19 Edwards Pl.
McNeely, G. H., Jr., *Fr. a.* 18 N W
McNulty, E. J., *Jr. a.* 136 Nassau St.
Macomber, S. G., *So. s.* 12 N E
MacPhee, W. S., *Sr. a.* Cap and Gown Club
McQuilkin, J. A., *q.* 24 Bank St.
McVay, M. S., *Sr. s.* 12 H
MacWilliam, J. D., *So. a.* 16 Park Pl.
McWilliams, J., Jr., *Trustee,* Pasadena, Cal.
Macy, C. L., *Assistant,* (15), General Delivery
Madden, D. B., *Jr. s.* 4 N M R

Magie, D., *Professor,* (6), 101 Library Pl.
Magie, W. F., *Dean of the Faculty,* (4), The Dean's House
Mago, J. G., *So. a.* 14 '79 H
Maier, H. W., Jr., *q.* 110 Nassau St.
Makrauer, S., *Jr. a.* 7 E B
Malcolm, T. H., Jr., *So. s.* 173 Nassau St.
Mallory, F. B., *Sr. a.* 52 Jefferson Rd.
Malone, W. L., *q.* 173 Nassau St.
Manchee, A. L., *Sr. a.* 31 C
Manchee, F. B., *So. a.* 31 C
Mandell, J. L., *Sr. s.* 71 L
Mansfield, R. H., *Sr. s.* 17 B
Manthai, H. A., *Jr. ce.* 12 S D
Mapletoft, R. S., *Sr. s.* 8 N D
Marburg, F. G., *So. s.* 4 U P
Marden, C. C., *Professor,* (7), 112 Mercer St.
Marden, N. B., *Jr. a.* 15 N W
Margetts, W. C., *So. ce.* 10 N R
Marks, M. F., Jr., *Fr. a.* 30 Mercer St.
Marlatt, R. E., *Jr. a.* 7 W B
Marquand, A., *Professor,* (3), Guernsey Hall
Marquis, R. I., *Jr. a.* 41 B
Marsh, O. T., *Sr. s.* 7 B H
Marshall, J. R., *Jr. s.* 11 Dickinson St.
Marshall, P., *Jr. s.* 68 L
Marshall, R. D., III., *Fr. eng.* 101 H
Martin, J. P., *g.* 5 B S
Martin, J. S., *Jr. a.* 42 L
Martin, R., *Fr. s.* 11 Alexander St.
Martin, T. W., III., *So. a.* 46 Wiggins St.
Martin, W. R., *Sr. s.* 65 B
Martino, I., *Fr. s.* 53 Park Pl.
Marx, H. A., *q.* 16 Vandeventer Ave.
Mason, A. T., *f.* 1 B G C
Mason, S. A., *q.* 83 Jefferson Rd.
Massey, W. E., Jr., *Sr. a.* 32 '79 H
Mather, F. J., Jr., *Professor,* (6), 8 Evelyn Pl.
Mathews, F. P., *Fr. s.* 32 Vandeventer Ave.
Mathey, C. F., *So. s.* 9 E M W
Matsumoto, K., *Sr. a.* 36 Univ. Pl.
Matthews, H. F., *g.* 62 G C
Matthews, T. S., *Sr. a.* 241 C'y
Maull, B. S., *Sr. a.* 5 L P
Mawdsley, J. B., *g.* 91 G C
Maxwell, E. L., *Sr. a.* 138 Nassau St.
Maxwell, J. C., *Fr. s.* 20 Linden Lane
Maycock, B. H., *Fr. s.* 12 Chambers St.
Mayer, H. E., *Jr. s.* 110 Moore St.
Mayfield, F. P., *Jr. a.* 114 H
Maynard, D. M., *Sr. s.* 2 N E
Maynard, J. L., *Assistant,* (16), 24 Dickinson St.
Mayor, A. H., *Sr. a.* Cuyler Farm
Mayor, A. G., *Lecturer,* (12), Princeton, N. J.
Mead, T. E., *Fr. s.* 15 Dickinson St.
Meade, J., *So. s.* 22 B
Meek, W. T., *Sr. a.* 215 H S
Meeker, A. Jr., *Fr. a.* 24 Nassau Inn
Meeson, J. E. W., *Jr. s.* 7 A H
Mehl, R. F., *Assistant,* (15), 2 B G C
Meirs, J., *So. s.* 105 P
Meistrell, F. J., *q.* 11 B
Mekeel, H. S., *Fr. s.* 36 Vandeventer Ave.
Melady, R. L., *So. a.* 29 S E
Melcher, R. E., *So. a.* 2 U P
Mellis, D. B., *Sr. s.* 26 C
Mellon, M. T., *Sr. a.* 66 C
Menzies, A. W. C., *Professor,* (7), 187 Prospect Ave.
Meriwether, J. H., *Jr. s.* S W M W
Merrill, J. L., *So. a.* 2 B H'm
Merriman, C. H., III., *Fr. s.* 32 Mercer St.
Merritt, S., II., *Sr. a.* Colonial Club
Merry, C. E., *q.* 27 Bank St.
Meston, A. W., *So. s.* 2 S E
Meurer, J. A., Jr., *Fr. a.* 215 Nassau St.
Meyers, G. R., *Sr. ce.* 2 C H'm
Michael, O., *So. a.* 35 Hill

Mierow, H. E., *g.* 5 A GC
Milbank, R., *Fr. s.* 14 L
Miles, H. H., *Sr. s.* 40-50 P
Miles, J. B., Jr., *So. a.* 81 H
Millard, A. J., *Sr. a.* 66 Nassau St.
Millard, W. M., *So. s.* 10 S W
Miller, C. R., *Sr. a.* 51 H
Miller, C. V., *g.* 21 A S
Miller, E. F., *g.* 46 A S
Miller, E. K., *Sr. s.* 72 L
Miller, H. D., *Sr. a.* 40 P
Miller, J. M., *So. s.* 2 A H'm
Miller, J. M., *Jr. s.* 162 L
Miller, M. B., *Fr. s.* 31 Univ. Pl.
Miller, M. G., Jr., *So. a.* 21 Chambers St.
Miller, S. G., *Fr. a.* 32 Mercer St.
Miller, W. A., *Fr. a.* 21 Edwards Pl.
Millholland, J. A., *Sr. a.* 22 H
Millsaps, W. W., *Jr. a.* 18 N E
Milne, S. W., *Sr. a.* 138 Nassau St.
Mimovitch, I., *g.* 38 S E
Minahan, J. B., *Fr. a.* 175 Nassau St.
Miner, G. F., *Fr. a.* 53 Univ. Pl.
Miner, H. C., Jr., *Jr. a.* 35 L
Minor, E. C., *Fr. a.* 38 Moore St.
Mishima, M., *So. a.* 9 W
Mitcham, E. H., *Jr. ce.* 36 Hill
Mitchell, J. D., Jr., *Jr. a.* 98 Nassau St.
Mitchell, J. J., 3rd, *Sr. s.* 52 '79 H
Mitchell, T. W., *Fr. s.* 143 L
Mitchell, W., *Fr. a.* 28 Vandeventer Ave.
Mitchell, W. H., *So. a.* 144 L
Mockridge, H. C. F., *Jr. a.* 41 B
Moffat, H. A., *Fr. a.* 10 Madison St.
Mohle, F. B., *So. a.* 89 Univ. Pl.
Molloy, J. G. L., *So. a.* E E B
Monroe, S., *Jr. s.* 5 N R
Monroe, W., *So. s.* 5 N R
Montgomery, J. A., Jr., *Fr. a.* 8 S E
Montgomery, J. S., Jr., *So. s.* 9 W M W
Montgomery, N. T., *Jr. s.* 66 L
Moody, H. W., *Fr. s.* 5 M D
Moore, L. P., Jr., *g.* 1 A S
Moore, P., *Jr. a.* 12 B
Moore, T. M., *Fr. s.* 13 S M R
Morck, W. C., *Fr a.* 8 E W
Mordecai, A. L., *So. a.* 71 L
More, P. E., *Lecturer,* (12), 245 Nassau St.
Morehouse, R. A., *So. a.* 7 W M W
Moreland, C. C., *So. a.* 8 E B
Moreland, G. B., Jr., *Jr. s.* 251 C'y
Morey, C. R., *Professor,* (8), 342 Nassau St.
Morgan, A. P., *Sr. a.* Ivy Club
Morgan, H. W., *Fr. a.* 8 S W B
Morgan, R. P., *Sr. a.* 114 B
Morgan, S. W., *Assistant Professor,* (10), 12 Boudinot St.
Morgan, W. L., Jr., *Jr. a.* 217 Nassau St.
Morris, R. W., *g.* 46 Spring St.
Morrisson, R., *Jr. s.* 72 B
Morse, A. E., *Assistant Professor,* (10), 269 Nassau St.
Morton, J. D., *Sr. a.* 53 '79 H
Moser, C. C., *So. a.* 6 Bank St.
Moser, K., *So. a.* 6 Bank St.
Moser, P. D., *Sr. a.* 171 L
Moses, F. J., Jr., *Fr. a.* 30 Mercer St.
Mosher, J. S., *Jr. a.* 16 S W
Motley, A., *Jr. a.* 5 S E B
Motter, T. H. V., *Sr. a.* 5 W B
Moulton, J. H., Jr., *Jr. s.* 42 B
Movius, G. H., *Fr. s.* 23 Madison St.
Mozier, A. W., *Jr. ce.* 11 A H
Mudge, B., Jr., *Fr. s.* 66 Nassau St.
Mudge, C. L., *Fr. a.* 41 S E
Mueller, R. S., *Sr. s.* 44 L
Mulford, W. W., Jr., *Fr. s.* 14 N D
Mulliken, J. R., *Jr. a.* 80 P
Mundt, A. J., *Instructor,* (15), 59 Wiggins St.
Mundy, C. P., *Fr. a.* 34 C
Munro, D. C., *Professor,* (7), 119 Fitz Randolph Rd.
Munroe, P., *So. s.* 36 Hill
Murch, H. S., *Assistant Professor,* (10), 6 A H
Murdock, J. M., Jr., *Fr. s.* 11 Alexander St.
Murkland, H. B., *So. a.* 10 S W B
Murphey, S., *Sr. a.* 341 C'y
Murray, H. S., *Jr. a.* 308 H'm

Murray, T. F., *Sr. a.* 21 N E
Murrey, F. L., *Jr. a.*
217 Nassau St.
Murrie, W. M., *So. s.* 41 C
Murrill, R. S., *q.* 2 Nassau St.
Murtland, W., *Sr. s.*
138 Nassau St.
Muse, A. B., *So. a.* 7 W M W
Musser, D. B., *Fr. s.*
11 Alexander St.
Mutch, T. S., *q.* 23 Bank St.
Muto, K., *g.* 24 Dickinson St.
Myer, S., Jr., *Sr. a.* 230 Nassau St.
Myers, D. G., *Sr. a.* 12 H'm
Myers, L., *g.* 20 B S
Myers, W. K., *Fr. s.* 86 S E
Myers, W. S., *Professor,* (8),
104 Bayard Lane
Mylod, J. F., *Jr. s.* 7 S W

Nakamura, H., *Sp.* 7 M D
Nathan, H. L., *So. a.* 11 S E
Naumburg, E., Jr., *So. a.*
2 Nassau St.
Neelands, T. D., Jr., *q.*
47 Nassau Inn
Neher, F., *Professor,* (5),
148 Library Pl.
Neil, Henry, Jr., *Fr. s.*
13 Nassau St.
Neimeyer, R. H., *Fr. a.*
21 Chambers St.
Nelden, A. G., *Sr. a.* 5 W B
Nelson, B. H., *So. a.*
88 Wiggins St.
Nelson, R. W., *Jr. a.* 162 C'y
Neville, J. M. M., *Fr. a.*
23 Bank St.
Newbold, C., *Fr. a.* 9 S R
Newby, R. A., *So. s.* Thomson Hall
Newell, J. P., Jr., *So. ce.* 5 S R
Newell, T. S., *Fr. a.* 31 Univ. Pl.
Newlin, R. S., *Sr. s.* 11 '79 H
Newman, A. L., II., *Jr. a.* 16 W W
Newton, D., *Jr. a.* 19 W W
Newton, T., *Fr. a.* 19 W W
Nicholes, R. G., *Jr. s.* 80 Bank St.
Nichols, C. A., Jr., *Jr. a.* 13 C
Nichols, G. H., *Sr. s.* Tower Club
Nicholson, L. A., *So. s.* 15 N D
Nicholson, T., *Jr. a.* 105 H
Nieh, L. K. K., *q.* 12 Chambers St.
Nields, J. F., Jr., *Fr. s.*
68 Prospect Ave.
Niemann, K. E., *Jr. a.* 65 H
Nies, A. B., *Instructor,* (12),
41 Jefferson Rd.
Niles, P. B., *Jr. a.* 12 A H
Nisbet, W. B., Jr., *Fr. eng.*
84 Vandeventer Ave.
Nishikawa, T., *Sp.* 82 B
Noble, H., Jr., *Fr. a.* 47 Univ. Pl.
Norrie, L. G., *q.* 21 Chambers St.
North, J. P., *Sr. a.* 2 N D
Noss, F. B., *Jr. a.* 3 W M W
Noss, T. K., *Fr. a.* 3 W M W
Nyce, N. S., *Jr. s.* 121 L

Oates, W. J., *Fr. a.* 24 H'm
Ober, W. S., *Jr. a.* 76 H
O'Brien, R. J., *Fr. s.* 44 C
O'Brien-Moore, A., *f.* 5 B G C
Odell, H. B., Jr., *Jr. a.* 14 P
Oehmler, H. K., *Jr. a.*
118 Nassau St.
Ogden, R. F., *g.* 35 A S
O'Hara, C. E., Jr., *Fr. a.*
34 Vandeventer Ave.
O'Kane, R. J., *Jr. a.*
40 Wiggins St.
Oliver, R. G., *Fr. s.* 74 B
Olney, W. B., *Fr. a.* 39 Wiggins St.
Oliphant, R. T., *So. a.*
2 Nassau St.
Olmstead, P. S., *f.* 15 B G C
O'Meara, D. L., *Jr. s.* 7 S D
Opie, H. R., *Director of Bureau of Appointments and Student Employment,* 316 Nassau Hall
O'Reilly, H. C., *Fr. s.*
66 Nassau St.
Orth, W. C., *Jr. a.* 23 L
Orvis, F. W., *Fr. a.* 15 Univ. Pl.
Osage, E., *Sp.* 11 Jefferson Rd.
Osawa, Y. J., *Fr. a.*
27 Vandeventer Ave.
Osborn, J. D., *Sr. a.* 44 H
Osborn, W. C., *Trustee,*
New York, N. Y.
Osborne, F. S., *So. a.* 164 L
Osgood, C. G., *Professor,* (7),
92 Stockton St.
Osgood, H. W., *Fr. a.* 16 Bank St.
Osterholt, R. B., *Sr. s.* A E B

Outhwaite, J. H., *Fr. s.* 90 Nassau St.
Overstreet, C. L., Jr., *q.* 8 Hamilton Ave.
Owen, H. M., Jr., *So. a.* 6 S D
Owen, V., Jr., *q.* 41 Jefferson Rd.
Owen, W. F., *Jr. s.* 311 H'm
Owen, W. M., *q.* 20 Bank St.
Oxholm, T., *Sr. s.* 17 B
Ozias, R. E., Jr., *Sr. s.* 40-50 P

Pabst, A. U., *q.* 164 Nassau St.
Paddock, S. M., *Fr. a.* Nassau Inn
Page, C. G., *Sr. a.* 61 B
Page, E. S., Jr., *Sr. a.* 102 B
Page, F. L., *Sr. a.* 153 L
Page, H., Jr., *Jr. s.* 43 B
Page, W. H., *Jr. s.* 71 H
Pagenkopf, F. K., *Fr. s.* 10 N E
Palmer, A. P., *Sr. a.* 3 A C
Palmer, G. G., *So. a.* 2 B H'm
Palmer, S. P., *q.* Murray-Dodge
Palmer, W. A., *Fr. a.* 11 Dickinson St.
Palmore, P. L., *g.* 28 A S
Pardoe, W. E., *Sr. ce.* 9 S M R
Park, E. A., *Assistant Professor,* (11), 22 Alexander St.
Park, J. S., *g.* 300 H S
Parke, A. T., Jr., *So. s.* 3 A H
Parke, F. H., *Jr. a.* 230 Nassau St.
Parke, R. I., *g.* 6 B G C
Parke, W. E., II., *So. s.* 3 A H
Parker, C. L., Jr., *So. a.* 16 Park Pl.
Parker, H. G., Jr., *g.,* 42 G C
Parker, H. W., *Fr. a.* 12 S E
Parker, L. M., *Fr. a.* 40 S E
Parker, W. I., *So. a.* 15 L P
Parrott, T. M., *Professor,* (4), 104 Mercer St.
Parsons, K., Jr., *Fr. s.* 22 Vandeventer Ave.
Paschal, H. S., *So. a.* 90 Nassau St.
Paton, R. T., *Fr. s.* 9 S D
Paton, S., *Lecturer,* (12), Kingston Rd., Lake Carnegie
Patt, H. B., *So. s.* 18 L
Patterson, R. T. L., *Jr. ce.* 15 N E

Patton, F. L., *Ex-President,* (3), Hamilton, Bermuda
Paul, A. G., Jr., *Jr. a.* 8 U P
Paul, G. A., *Fr. a.* 211 Nassau St.
Pawley, F. R., *Jr. a.* 72 P
Payne, F. B., *So. s.* 23 C
Payne, F. N., *Jr. s.* 54 '79 H
Paynter, R. K., Jr., *Fr. s.* 91 B
Pearce, A. R., *So. a.* 39 N E
Peard, F. F., Jr., *Sr. s.* 103 B
Pease, L. F., *Curator of the Music Library,* University Library
Pease, R. N., *f.* 61 G C
Peck, G. M., *Curator of Special Collections,* (15), University Library
Peck, R. D., *Jr. a.* 64 B
Peckerman, E. R., Jr., *Fr. a.* 23 Madison St.
Peden, E. D., *q.* 66 Nassau St.
Peeples, L. M., *Jr. s.* 62 H
Pell, W., 2nd, *So. a.* 11 C
Penfield, P. L., *Jr. a.* 91 H
Penick, S. B., Jr., *Fr. a.* 15 Univ. Pl.
Penney, R. K., *Fr. s.* 58 N. Tulane St.
Penney, R. S., *Sr. a.* 43 L
Pepe, J., *Fr. a.* 308 H S
Perrine, C. F., *Fr. s.* 65 Wiggins St.
Perry, D. L., *Fr. s.* 309 H'm
Perry, E. R., *g.* 64 G C
Pessagno, E. A., *Sr. ce.* 17 S M R
Peterson, G. M., *Fr. a.* 20 S E
Pettey, J. J., *Jr. s.* 14 N W
Peyton, G. S., *So. s.* 113 B
Phillips, A. H., *Professor,* (5), 54 Hodge Rd.
Phillips, F. M., *Sr. s.* 8 W W.
Phillips, G. O., *Fr. s.* 19 Univ. Pl.
Phillips, D. H., *Fr. s.* 74 B
Pickering, R. C., *So. a.* 10 P
Piel, R. P., *Fr. s.* 36 Vandeventer Ave.
Pierce, H. N., *Fr. a.* 12 Park Pl.
Pierce, J. D., *Jr. s.* 36 L
Pilling, R. W. S., *q.* 11 Vandeventer Ave.
Pirie, J. T., 2nd, *So. a.* 23 S E
Pitney, J. O. H., *Trustee,* Morristown, N. J.

Pitrachat, B. C., *Jr. a.*
16 Vandeventer Ave.
Platt, J. C., 3rd, *Sr. s.* 10 S D
Plauth, W. H., *So. s.* 6 W B
Plesscher, J. G., *g.* 25 Bank St.
Plum, R. N., *Fr. a.*
15 Dickinson St.
Poe, J. P., *Sr. a.* 12 S W
Pole, H. S., II, *So. a.* 6 Bank St.
Polinsky, H., *q.* Murray-Dodge
Pollins, A. H., Jr., *So. a.*
42 Wiggins St.
Poon, Y. K., *Jr. a.* 13 N D
Pope, E. S., *Jr. a.* 162 C'y
Pope, J. N., *Sr. a.* 432 C'y
Porter, A. G., *Fr. a.* 62 B
Porter, B. P., *Sr. s.* 51 C
Porter, J. F., *Fr. a.* 47 Univ. Pl.
Porter, L. T., *Jr. ce.* 53 '79 H
Posey, H. L., *Jr. a.* 91 H
Post, F. L., *Sr. a.* 1 A H
Pottenger, R. T., *So. a.*
172 Nassau St.
Potter, H. R., *So. a.*
44 Vandeventer Ave.
Potter, R. G., *Jr. a.* 17 E W
POTTER, W. W., *Lecturer,* (12),
1710 Real Estate Trust Bldg.,
Philadelphia, Pa.
Powell, G., *f.* 154 G C
Powell, J. W., Jr., *So. s.* 124 L
Powell, R. I., *Sr. a.* 310 H'm
POWERS, D. H., *Assistant,* (16),
4 B G C
Powers, W. S., *Jr. s.* 62 H
PRENTICE, W. K., *Professor,* (5),
12 Nassau St.
Pressinger, W. P., Jr., *Sr. a.*
217 Nassau St.
Prewitt, A., *So. a.* 51 B
Price, T. P., *Fr. a.* 12 S E B
Price, W. E., *Jr. s.* 4 S M R
Prichard, H. L., *Fr. a.*
11 Dickinson St.
PRIEST, G. M., *Professor,* (7),
Absent
Prime, E. G., *Jr. a.* 232 C'y
Pritchard, L. W., *Jr. a.* 108 P
PROCTER, W. C., *Trustee,*
Cincinnati, Ohio
Pruden, W. D., *So. a.* 23 M D
PURDY, D. M., *Instructor,* (14),
24 Dickinson St.
Purdy, J. G., *g.* 415 H S
Purmort, P. W., *q.* 23 William St.
Purvis, E. D., *So. ce.* 19 Univ. Pl.
Putnam, C., *So. s.* 10 Bank St.
Pyle, G. M., *Jr. a.* 12 E W

Quarles, J. V., *Fr. a.*
11 Dickinson St.
Quayle, W. H., *So. a.* 38 S E

Rabinowitz, S. M., *Sr. a.*
16 Spruce St.
Rae, J., *Jr. a.* 42 B
Ralph, M. N., *Fr. s.* 46 Park Pl.
Ramel, E. D., *Fr. a.* 66 Nassau St.
Ramirez, J. E., *q.* 22 Madison St.
Rampona, J. R., *Fr. s.*
215 Nassau St.
Ramsay, J. B., Jr., *Sr. a.* 84 P
Ramsey, R. A., *Fr. a.*
11 Dickinson St.
Rankin, B. K., Jr., *Fr. a.* 22 P
Rankin, E. F., *Fr. a.*
11 Dickinson St.
Rankin, J. B., *Jr. a.* 41 L
Rankin, K. L., *q.* 14 Madison St.
Rankin, R. S., *g.* 154 Mercer St.
RANKIN, W. M., *Professor,* (4),
5 Evelyn Pl.
Ravenel, D., Jr., *Sr. a.* 96 B
Rawson, E. G., Jr., *Jr. s.* 25 S E
RAYCROFT, J. E., *Professor,* (6),
298 Nassau St.
Raymond, O. M., *So. a.*
11 N M R
Raymond, R., *So. s.* 164 L
Raynolds, A. H., *Sr. s.*
Nassau Inn
RAYNOR, G. E., *Instructor,* (13),
31 William St.
Read, R. O., *Jr. s.* 131 H
Reakirt, C. C., Jr., *So. a.* 4 A C
Reay, N. W., Jr., *Jr. a.* 63 H
Reed, G. P., *g.* 25 A S
Reeve, W. S., *Sr. a.* 6 N R
Regan, A. C., *Sr. s.* 52 H
Reiber, M. A., *So. a.* 15 L P
Reidemeister, W. W., *So. a.* 2 U P
Reilly, E. J., Jr., *Fr. s.*
58 Univ. Pl.
Reilly, H. F., *Fr. a.* 312 C'y
Remsen, D. B., *Fr. a.* LaVake Pl.
Renshaw, L., *Fr. s.* 19 Univ. Pl.

RENTSCHLER, G. S., *Trustee*, Hamilton, O.
Rentschler, W. A., *Fr. s.* 4 E M W
Reps, D. W., *Sr. s.* 63 '79 H
Reuter, C. S., Jr., *Fr. s.* 53 Univ. Pl.
Reyburn, W. E., *Fr. a.* 84 Vandeventer Ave.
Reynolds, A. E., *So. s.* 54 H
Reynolds, E. B., Jr., *Sr. a.* 98 B
Reynolds, J. M., *Sr. a.* 94 P
Rhodes, J. B., *Sr. a.* 104 P
Rhodes, R. D., *Fr. a.* 64 C
Riccardi, G. A., *Sr. a.* 10 N W
Rice, C. H., *g*, Psychological Laboratory
Richards, W. B., Jr., *So. a.* 51 B
Richardson, D. W., *Sr. a.* 263 C'y
RICHARDSON, E. C., *Director, University Library*, (4), 220 Mercer St.
Richardson, F. E., Jr., *So. s.* 92 H
RICHARDSON, H., *Trustee*, Atlanta, Ga.
Richardson, H. I., *Sr. ce.* 52 '79 H
Richardson, W. P., *Jr. ce.* 5 L P
Rick, E. M., *So. ce.* 82 B
Rickert, VanD., Jr., *Jr. a.* 262 C'y
Ridenour, P. D., *Jr. a.* 8 U P
Ridgeway, G. L., *Jr. a.* 25 N E
Riester, G. J., *g.* 403 H S
Riley, H. P., *Fr. a.* 29 N E
Ringler, A. P., *g.* 136 Nassau St.
Riordan, E. A., *q.*
Rising, E. S., *Fr. a.* 5 Madison St.
Ritchie, T. M., *Fr. s.* 7 B
Robbins, C. H. D., *Fr. a.* 39 Wiggins St.
Robbins, E. C., *Jr. a.* 8 M D
ROBBINS, E. Y., *Professor*, (5), Absent
Roberts, B. P., *So. a.* 32 H
Roberts, C. W., Jr., *So. a.* 53 Tulane St.
Roberts, E. E., *Jr. a.* 12 N E
Roberts, H. C., *Jr. a.* 42 H
Roberts, S. C., *Fr. a.* 9 Park Pl.
Roberts, W. C., *Jr. a.* 11 '79 H
ROBERTS, W. VANB., *Instructor*, (12), 210 Palmer Laboratory
Robertson, F. F., *Jr. a.* 37 N E
Robertson, G. M., *Sr. s.* 122 H
Robertson, R. S., *Fr. s.* 19 Bank St.
Robins, H. N. R., *Sr. a.* 8 E M W
ROBINSON, C., *Curator of Mediaeval History*, (10), 144 Library Pl.
Robinson, C. A., Jr., *Sr. a.* 23 B
Robinson, D. E., *Jr. s.* 72 B
Robinson, G. M., *Fr. s.* 27 Univ. Pl.
Robinson, R. K., *Fr. a.* 58 B S
Roblin, J. H., *So. ce.* 10 N R
Rodda, K. S., *Jr. a.* 32 S E
Roddey, W. L., *q.* 29 Bank St.
Rodgers, J. T., *Sr. a.* 52 B
Rodgers, O., *Sr. a.* A B
Roessler, E. C., *Sr. a.* 116 B
ROGERS, C. H., *Curator of the Museum of Zoology*, Nassau Inn
Rogers, M. H., *Jr. a.* 148 H
Rogers, R. S., *f.* 81 G C
ROGERS, R. W., *Professor*, (8), Madison, N. J.
Rogers, W., Jr., *f.* 54 G C
Rogers, W. S., *Fr. s.* 31 Univ. Pl.
RONDTHALER, T., *Reader*, (16), G C
Romaine, J. G., *Jr. a.* 11 A H
ROOT, R. K., *Professor*, (7), 31 Chambers St.
Root, W., *So. s.* 15 Univ. Pl.
Rosborough, A. B., *Sr. a.* 133 L
Rose, G., III, *Sr. a.* 412 C'y
Rosenberg, A. A., *Fr. a.* 47 Univ. Pl.
Rosenwald, J. S., *q.* 17 Witherspoon St.
Ross, H. R., *Fr. a.* 55 Jefferson Rd.
Ross, J. A., Jr., *Sr. s.* Cap and Gown Club
Ross, J. M., Jr., *Fr. s.* 6 W B
Ross, P. F., *Fr. a.* 15 N M R
Ross, W. W., Jr., *Fr. s.* 66 Nassau St.
Rossin, E. L., *Sr. s.* 104 H
Roudebush, F. W., *Sr. a.* 332 C'y
Rowe, R. M., *q.* 90 Nassau St.
Rowley, W. T., *Sr. s.* 16 B
Rule, G. B., *Sr. ce.* 61 L
RUSSELL, A., *Director of Music*, (12), 160 W. 95th St., New York, N. Y.
Russell, D., *Fr. a.* B S

Russell, H. N., *Professor,* (6), 79 Alexander St.
Russell, T. W., *Fr. a.* 12 Princeton Ave.
Rutan, F. E., Jr., *Jr. s.* 7 U P
Rutherfurd, D., *Jr. a.* 143 H
Rutter, D. R., *Sr. a.* 97 B
Ryan, J. R. T., II, *Sr. a.* Cottage Club
Ryan, W. K., *Fr. a.* 31 Univ. Pl.

Sada, A. G., *Fr. s.* 11 Dickinson St.
Sadler, H. M., *So. s.* 39 Univ. Pl.
Safferstone, E., *Jr. a.* 47 Spring St.
Sage, H. E., *Sr. s.* 64 L
Sahler, C. P., *Fr. s.* 44 B S
Sams, R. S., *Fr. s.* 38 Moore St.
Samuels, N. B., *So. a.* 10 P
Sanders, D. M., *q.* 63 H
Sandidge, W. L., Jr., *Instructor,* (14), 126 G C
Saul, C. D., Jr., *Fr. a.* 27 Edwards Pl.
Saums, W. A., *Sr. s.* 10 W M W
Savage, F. A., Jr., *Jr. s.* 52 C
Sawhill, J. A., *g.* 5 C G C
Sawyer, R. F., *Fr. s.* 136 Nassau St.
Scarff, J. G., *Sr. a.* 21 B
Scarlett, R. G., *Sr. a.* 84 P
Scattergood, G. L., *Fr. s.* 51 Univ. Pl.
Schaefer, R. J., Jr., *So. s.* 9 M D
Scheck, M. G., *Instructor,* (15), 11 B G C
Schelker, W. G., Jr., *Jr. a.* 21 L
Schenck, C. K., *Sr. s.* 12 A H
Schenecker, E. W., *Jr. a.* 103 P
Schimmel, J., 3rd., *q.* 10 Bayard Lane
Schimpff, E. C., *Jr. s.* 18 W W
Schlaitzer, C. W., Jr., *So. a.* 12 W W
Schlesinger, A. C., *g.* 94 G C
Schlesinger, H. J., *q.* 55 Jefferson Rd.
Schlosberg, H., *Fr. a.* 19 S E
Schotland, J. J., *Fr. a.* 10 E M W
Schlotterer, R. C., *Sr. s.* 6 W M W
Schmalz, A. G. H., *So. a.* 35 Univ. Pl.
Schmertz, L. R., Jr., *Jr. a.* 12 B
Schofield, F. P., *Sr. s.* 9 N M R
Scholl, R. H., *Sr. s.* 26 N E
Schrauff, W. B., *Sr. a.* 34 H
Schullinger, K. W., *So. s.* 61 H
Schulz, O. F., *Jr. a.* 22 L
Schusler, C. H., *Jr. s.* 13 N E
Schuster, N. W., *Jr. s.* 123 L
Schutte, F. A., *Sr. a.* 10 N D
Schwartz, E., *Jr. a.* 38 L
Schwartz, P., *ee.* G C
Schwed, F., Jr., *So. a.* 16 Edwards Pl.
Schwingel, M. F., *Fr. s.* 16 Bank St.
Scoon, R. M., *Assistant Professor,* (10), 19 Cleveland Lane
Scott, C. J., *So. s.* Box 372
Scott, D. G., *Fr. a.* 10 Madison St.
Scott, J. W., Jr., *Jr. a.* 72 P
Scott, R. A., *Fr. a.* 21 Chambers St.
Scott, W. B., *Professor,* (3), 114 Broadmead
Scott, W. E., *Jr. a.* Nassau Inn
Scribner, C., *Trustee,* Morristown, N. J.
Scudder, R. D., *Fr. a.* 13 E W
Scull, J. I., *Curator of Ex-Libris,* University Library
Scull, R. B., *Sr. a.* 138 Nassau St.
Scull, W. S., *Fr. s.* 53 L
Seidensticker, A. J., *Jr. a.* 8 Hamilton Ave.
Selden, J. E., *So. a.* 4 M D
Sellers, M. A., *So. a.* 4 N R
Sellers, W., 2nd, *So. s.* 71 H
Semans, E. W., *So. s.* 124 H
Semple, J. B., Jr., *So. s.* 90 Nassau St.
Seufert, W. C., *Fr. eng.* 15 Univ. Pl.
Sexton, E. H. L., *So. a.* 15 L
Seymour, O. C., *g.* 38 A S
Shackelford, R. T., *Fr. a.* 90 Nassau St.
Shaffer, C. C., *Sr. a.* 1 N E
Shafto, E. M., *So. s.* 16 Park Pl.
Shannon, A. J., *So. a.* 12½ Vandeventer Ave.
Shannon, J. R., *f.* 2 A G C
Shaw, R., *So. a.* 90 Nassau St.
Shea, G. E., Jr., *Sr. a.* 6 E W

Shea, J. B., *Trustee,* Pittsburgh, Pa.
Shear, T. L., *Lecturer,* (12), 211 No. B'way, Yonkers, N. Y.
Sheldon, D. S., *Jr. a.* 8 S W
Sheldon, E. W., *Trustee,* New York, N. Y.
Sheldon, G. W., *Sr. a.* 2 W B
Shellabarger, S., *Assistant Professor,* (11), 7 Greenholm
Shenstone, A. G., *f.* 14 C G C
Sheppard, E. W., *Sr. a.* 18 S E
Sherman, A. R., *Jr. a.* 102 P
Sherman, C. C., *Jr. s.* 123 L
Sherman, E. J., II., *Fr. a.* 21 Chambers St.
Sherrerd, W. D., Jr., *Fr. a.* 8 E W
Sherwood, S., *Jr. a.* 61 '79 H
Shields, H. L., *Fr. eng.* 15 Univ. Pl.
Shipman, H. R., *Associate Professor,* (9), 27 Mercer St.
Shipway, C. M., *Sr. a.* 18 B
Shober, E. W., *So. s.* 13 '79 H
Shoemaker, W. H., *So. a.* 9 N W
Shore, S. W., *Fr. s.* 80 Alex. St.
Shrady, R. H., *So. s.* 142 L
Shriver, V. P., Jr., *Sr. s.* 63 P
Shull, G. H., *Professor,* (7), 60 Jefferson Rd.
Sieker, J. H., *So. s.* 28 N E
Siering, R. F., *Fr. s.* 14 S D
Sikes, G. G., *Assistant to the Secretary,* 314 Nassau Hall
Silberman, R. P., *Fr. a.* 10 E M W
Silvester, L. V., *Assistant,* (15), Mt. Lucas
Silz, L. J., *So. a.* 32 Mercer St.
Simons, C. D., III., *Fr. a.* Peacock Inn Annex
Simons, J. F., *So. s.* 300 H'm
Simpson, A., *Sr. a.* 2 S D
Sinclair, D. B., *Assistant Professor,* (11), 400 Nassau St.
Sinclair, W. J., *Assistant Professor,* (10), 154 Prospect Ave.
Sinclaire, J., *Sr. s.* 138 Nassau St.
Sinclaire, M., *Sr. s.* 24 L
Singleton, E. L., *Sr. a.* 21 P
Sisler, W. T., *Jr. s.* 342 C'y
Sisson, E. G., Jr., *So. s.* 21 Hill
Sitterly, B. W., *f.* 15 B G C
Skelding, H. T., *Sr. s.* 15 B
Skinner, R. M., *q.* 11 Bank St.
Slack, C., *So. s.* 11 Vandeventer Ave.
Slade, C. B., Jr., *Fr. eng.* 20 Linden Lane
Slagle, A. R., *Sr. a.* 51 C
Slater, J. E., *g.* 6 A S
Slawson, J. H., *Sr. s.* 51 L
Sloan, A. N., Jr., *g.* 5 Bryant St., Rahway, N. J.
Sloan, D. B., *Fr. s.* 30 Wiggins St.
Sloane, C. O., *Sr. a.* 331 C'y
Slocum, J. S., *Jr. a.* 10 S W
Smart, T., *Jr. a.* 201 H S
Smedley, M. H., *Jr. a.* 5 Hill
Smith, C. T., *Sr. s.* 20 N W
Smith, C. W., *Sr. a.* 10 S M R
Smith, D. D., *f.* 4 A G C
Smith, D. P., *Assistant Professor,* (10), 90 Bayard Lane
Smith, E. B., *Assistant Professor,* (10), 11 Cleveland Lane
Smith, E. G., *Sr. a.* 8 N R
Smith, E. S., Jr., *So. a.* 52 L
Smith, F. S., *Fr. s.* 14 Hamilton Ave.
Smith, F. S., *Fr. a.* 30 Wiggins St.
Smith, H. A., *Executive Secretary,* (16), Nassau Hall
Smith, H. P., *Sr. s.* 44 H
Smith, H. S. S., *Professor,* (4), 16 Dickinson St.
Smith, I. N., Jr., *So. s.* 82 H
Smith, J. G., *g.* 3 S R
Smith, J. V. V., *Fr. a.* 22 Hill
Smith, K. B., *So. s.* 6 Bank St.
Smith, V., *Sr. a.* 152 L
Smith, W. H., *So. a.* 54 L
Smith, W. H., Jr., *Jr. s.* 66 L
Smith, W. K., *Instructor,* (14), 302 Hodge Hall, Seminary
Smith, W. M., *Fr. s.* 18 Madison St.
Smith, W. W., *Sr. a.* 44 '79 H
Smyth, C. H., Jr., *Professor,* (5), 22 Morven St.
Smyth, C. P., *Instructor,* (13), 22 Morven St.
Snable, M. A., *Jr. s.* 18 S W

Snell, W. B., *Sr. a.* 18 N W
Snively, A. B., Jr., *So. s.* 1 S E
Snover, C. F., *Fr. a.*
45 Vandeventer Ave.
Snyder, E., *Sr. a.* 112 L
Snyder, J. I., *So. s.* 6 E B
Snyder, R. M., *Fr. a.* 14 Bank St.
Solimene, M. S., *Par.*
239 Pearl St., Trenton, N. J.
Solomon, A. E., *Fr. s.*
11 Vandeventer Ave.
Sommers, E., *Fr. a.*
28 Vandeventer Ave.
Soper, L. B., *Jr. a.* 65 H
Sortor, C. R., *Jr. a.* 21 Edwards Pl.
Sotter, H. J., *q.* 47 Univ. Pl.
Sour, R. B., *Fr. a.* 21 Edwards Pl.
Southworth, S. D., *f.* 146 G C
Sowles, H. M., *Fr. s.*
10 Bayard Lane
SPAETH, J. D., *Professor,* (6),
32 Edgehill St.
Spalding, C. D., Jr., *So. s.* 41 P
Spalding, J. C., *So. s.* 41-51 P
Spalding, W. F., *Jr. a.* 308 H'm
Sparks, W. B., *Jr. a.* 132 L
SPAULDING, E. G., *Professor,* (7),
8 Edgehill St.
SPEIR, F., *Counsel,* (14),
New York, N. Y.
Spence, J. E., *Jr. a.*
15 Dickinson St.
Spencer, J. L., Jr., *Fr. a.*
15 Dickinson St.
Spencer, T., *Jr. a.* 73 H
Spencer, W. B., Jr., *Sr. a.*
21 Olden St.
Spottiswoode, G., II., *Jr. a.*
14 A H
Spratt, D. J., *g.* 27 A S
Springer, E. L., *q.* 58 Univ. Pl.
Springmeyer, H. E., *So. a.*
35 Univ. Pl.
Sproul, J. W., *Jr. a.* 21 '79 H
Squier, F. C., Jr., *g.*
11 Dickinson St.
Stabler, E. H., *Sr. s.* 14 S W
Stabler, W. L., *So. s.*
32 1st Nat. Bank
Staeger, H., *Fr. s.* LaVake Pl.
Stalker, W. B., *Fr. s.* 40 N E
Stallman, F. B., *Fr. a.* 7 Park Pl.
Stanclift, F. C., *So. a.*
66 Nassau St.
Starr, L. A., *So. a.* 82 H
Statler, F. B., *g.* 32 A S
Stauffer, D. A., *Jr. a.* 19 N E
Stauffer, D. D., *So. s.* 2 A H
STEARNS, J. B., *Instructor,* (18),
6 B G C
Steele, H. M., *Jr. a.* 76 H
Steele, S. J., *q.* 5 Witherspoon St.
Steese, E., *So. a.* 10 Bank St.
Steimle, D. B., *Jr. a.* 42 S E
Stengel, E. C., *Fr. s.* 64 C
Stengel, G. D., *Sr. a.*
37 Wiggins St.
Stephan, A. H. F., *Sr. a.* 38 L
Stephens, D., *Fr. a.*
10 Bayard Lane
Stephens, J. U., *So. a.* 113 H
Stephenson, G. S., *Fr. a.*
53 Univ. Pl.
Stephenson, I. W., *Fr. s.*
18 Madison St.
STEPHENSON, R. M., *Instructor,*
(13), 33 G C
Sterrett, W. E., *So. a.*
90 Nassau St.
Stevens, K. P., *f.* 7 C G C
Stevens, N., *Jr. a.*
Cap & Gown Club
Stevens, R. K., *Sr. a.* 43 L
Stevens, W. M., *q.* 133 L
Stevenson, A. B., *Jr. s.* 30 P
Stevenson, A. E., *Sr. a.* 42 P
Stevenson, T. D., *Fr. a.*
86 Mercer St.
Stevenson, W. E., *Sr. a.* 322 C'y
STEWART, G. B., *Trustee,*
Auburn, N. Y.
STEWART, J. A., *Trustee,*
New York, N. Y.
STEWART, J. Q., *Assistant Professor,* (11), 14 Prospect Ave.
Stewart, P. W., *Sr. a.*
138 Nassau St.
Stewart, S. G., *Jr. s.* 121 H
STILLWELL, L. B., *Trustee,*
Lakewood, N. J.
Stillwell, R., *g.* 14 A G C
Stilson, E., Jr., *Sr. s.* 20 P
Stilwell, N. C., *Fr. s.* 8 Madison St.
Stinson, E., Jr., *Sr. s.* 70 P
Stinson, R., *Jr. a.* 103 B

Stockham, H., *Fr. eng.* 42 Murray Pl.
Stockton, R. C., *So. a.* 13 Bank St.
Stohlman, W. F., *g.* 34 G C
Stone, D. L., *Instructor,* (14), Nassau Club
Stone, J. S., *q.* 46 Spring St.
Stoneback, R. M., *q.* 175 Nassau St.
Stoner, F. R., Jr., *Fr. s.* 2 A C
Stout, E. C., Jr., *Fr. s.* 15 Univ. Pl.
Stout, F. S., *Fr. a.* 4 A H
Stout, W. H., *Sr. s.* 441 C'y
Stover, E. C., Jr., *g.* 12 G C
Strachan, F. D. M., Jr., *So. s.* 74 H
Strang, S. B., *Jr. a.* 1 S D
Strauss, J. R., *So. s.* 45 Hill
Straut, C. B., *Jr. a.* 41 '79 H
Strayer, J. R., *Fr. a.* 11 Alexander St.
Strean, J. G., Jr., *Sr. a.* 144 C'y
Street, J., Jr., *Fr. a.* 5 N D
Strong, H. L., *So. s.* 10 Nassau St.
Stuart, D. C., *Professor,* (8), The Western Way
Stuart, D. R., *Professor,* (5), 108 Mercer St.
Stuart, J., *Trustee,* Chicago, Ill.
Studdiford, A. D., *So. a.* 90 Nassau St.
Stuhler, W. R., Jr., *Jr. a.* 183 L
Stump, J. B., *So. a.* 462 C'y
Sturges, J. A., *Fr. a.* 15 Univ. Pl.
Sturges, P. F., *Fr. a.* 21 M D
Sturges, R. A. Jr., *Fr. a.* 84 Vandeventer Ave.
Sturhahn, R. E. E., *Sr. a.* 20 S W
Sullivan, F. J., *Assistant,* (15), 68 Wiggins St.
Sullivan, W. M., Jr., *q.* 19 Univ. Pl.
Summers, G. C., *Jr. s.* 122 H
Summers, O. S., *Jr. s.* 122 H
Sutherland, C. J., *q.* 1 D H'm
Sutherland, D. A., *Fr. s.* 29 Bank St.
Sutphen, H. R., Jr., *So. a.* 2 B C
Sutton, R. P., *Sr. a.* 6 S W
Swain, D. D., *So. a.* 14 N E
Swan, J. D., Jr., *Fr. s.* 43 Vandeventer Ave.
Swann, S., Jr., *Sr. s.* 64 H
Swede, A., *Sr. a.* Cap and Gown Club
Swenson, O., *Sr. ce.* 15 S M R
Swift, E. H., *g.* 81 G C
Sykes, S., *Fr. a.* 8 Hamilton Ave.
Sylvester, A., *Jr. a.* 122 L

Taber, S. R., *Curator of European War Posters Collection,* University Library
Tait, R. C., *Sr. a.* 81 B
Talbott, G. H., *Sr. a.* 11 Edgehill St.
Tallman, J. L., *Sr. s.* Cottage Club
Talmage, F. D., *Jr. a.* 12 W W
Talmage, P., *So. a.* 182 L
Talmage, T. H., *Sr. s.* Rosedale Rd.
Tappen, K. H., *Fr. eng.* 28 Vandeventer Ave.
Tarr, F. C., *Instructor,* (13), 206 Nassau St.
Tauchert, E. H., *Fr. a.* 21 Chambers St.
Taylor, C. M., II., *Fr. a.* 27 Univ. Pl.
Taylor, D. F., *Jr. ce.* A E B
Taylor, E. A., *Instructor,* (13), 1 B G C
Taylor, F. P. K., *So. a.* 123 H
Taylor, H. L., *Jr. a.* 21 '79 H
Taylor, H. S., *Associate Professor,* (9), 159 Nassau St.
Taylor, J. C., *Jr. a.* 11 H'm
Taylor, J. S., *So. a.* 7 B H
Taylor, K., *Trustee,* High Bridge, N. J.
Taylor, O. F., *Sr. a.* 11 U P
Taylor, W. M., *Jr. a.* 161 L
Ten Eyck, B. M., *So. a.* S E B
Tennant, G. G., Jr., *Sr. a.* 2 E B
Thatcher, J. H., *Fr. eng.* 46 Wiggins St.
Thayer, H. W., *Associate Professor,* (9), 12 Nassau St.
Thielen, B. P., *Jr. a.* 7 E M W
Thomas, C. D., Jr., *Fr. s.* 26 Bank St.
Thomas, E. T., *Jr. s.* 81 P
Thomas, J. F., *Jr. a.* 111 B
Thomas, J. M., *Fr. a.* 62 B
Thomas, L. S., *Fr. a.* 19 Univ. Pl.
Thomas, T. Y., *f.* 7 C G C

Thompson, B. F., *Fr. a.* 84 H
Thompson, C. R., *Jr. a.* 12 H
Thompson, D. H., *So. s.* 41 L
Thompson, G. E., *So. ce.* 1 W M W
THOMPSON, H. B., *Trustee,* Greenville, Del.
THOMPSON, H. D., *Professor,* (4), Absent
Thompson, J. L., Jr., *Jr. a.* 44 B
Thompson, M. A., *g.* 29 Bank St.
Thomson, C. P., *Jr. a.* 222 C'y
Thomson, S. H., *Sr. a.* 11 A S
Thomson, S. K., *Sr. s.* 8 S R
Thorne, J. W., Jr., *Fr. a.* 44 Vandeventer Ave.
Thorpe, J. R., *Fr. a.* 312 H'm
Tiedeman, C., *Fr. s.* 27 Univ. Pl.
Tietge, A., *g.* 138 Nassau St.
Tilden, L. E., *Sr. s.* 184 L
Tilgner, C., Jr., *Fr. eng.* 1 E H'm
Tillson, S. M., *Fr. s.* 9 S R
Tim, L. deJ., *Sr. s.* 2 B
Timolat, L. K., *Fr. a.* 41 Vandeventer Ave.
Tinker, G. F., *Jr. s.* 5 E B
Tippetts, C. S., *g.* 206 Nassau St.
Tobriner, W. N., *Jr. a.* 16 Edwards Pl.
Todd, F. P., *Fr. s.* 10 Bayard Lane
Todd, H. G., *Jr. a.* 26 M D
Todd, W. B., *Sr. a.* 153 L
Toensmeier, J. A., *Sr. s.* 3 S R
Tompkins, E. E., *So. a.* 35 S E
TOOKER, N. B., *Assistant Professor,* (10), 159 Library Pl.
Towers, A. G., Jr., *Jr. a.* 83 P
Towle, W. J., Jr., *Jr. s.* 9 E B
Townley, R., *Fr. s.* 66 Nassau St.
Townsend, C. C., *So. a.* 123 H
Townsend, F. P., Jr., *Fr. s.* 10 Madison St.
Townsend, G. B., Jr., *Jr. a.* 64 B
Trapnel, W. P., *Fr. s.* 19 Univ. Pl.
Trax, J. E., *Fr. a.* 32 Vandeventer Ave.
Treat, C. H., *q.* Field House
Treat, S. B., *Fr. a.* 24 S E
Trimble, D. C., *So. a.* 81 H
Trimble, I. R., *Sr. a.* 61 P
TROWBRIDGE, A., *Professor,* (5), Hodge Rd.
Trowbridge, C. F., *So. ce.* 15 Univ. Pl.
Trowbridge, W., *Fr. a.* 14 S D
Trumbull, M. S., *Fr. s.* 44 Hill
Tucker, W. A., *Sr. a.* 48 P
Tuller, L. H., *Fr. s.* 53 Univ. Pl.
Tureman, R. W., *Sr. a.* 351 C'y
Turle, W. L., *Jr. ce.* 44 B
Turner, A. B., *Sr. a.* 2 W B
Turner, B. C., *Fr. eng.* 14 Park Pl.
Turner, E. H., *Fr. s.* 27 Edwards Pl.
Turner, H. G., Jr., *So. s.* 23 Jefferson Rd.
Turner, H. T., *Sr. a.* 1 W B
Turner, L. A., *f.* 31 G C
Turney, C. J., *Jr. s.* 1 E W
Tuttle, C. H., *Sr. a.* 9 N D
Tuttle, W. G., *Sr. a.* 73 B
Twitchell, H. K., Jr., *So. a.* 6 Bank St.
Twyeffort, L. H., *Fr. a.* 1 B H'm
Tyler, T. H., *Fr. a.* 55 Jefferson Rd.
Tyson, E., *q.* Cleveland Lane
Tyson, H. L., *So. a.* 33 N E
Tyson, P. H., *Fr. a.* Cleveland Lane
Tyson, P. L., *Sr. s.* 20 N W
Tyson, R. S., *Fr. s.* 47 Park Pl.

Ulman, M., *Sr. a.* 14 H'm
Underwood, F. H., *Fr. s.* 27 Chambers St.
Unfried, M. C., *Jr. s.* 11 W B
Updike, O. L., *Fr. eng.* R. F. D. No. 2

Vahey, J. H., Jr., *Jr. a.* 3 L P
Van Beek, J., *g.* 67 B S
van Buren, F. R., *Jr. a.* 25 L
Vance, J. F., *q.* 23 William St.
Van Cleve, R. S., *Fr. a.* 4 A H
Vanderbilt, W. H., *Fr. s.* 212 C'y
van der Gracht, A., *q.* 10 Bayard Lane
van der Gracht, I., *q.* 10 Bayard Lane
Van Dyke, G. M. R., *Jr. a.* 14 S M R
VAN DYKE, H., *Professor,* (4), 59 Bayard Lane
Van Dyke, M., *g.* 69 B S
VAN DYKE, P., *Professor,* (4), Absent

van Gerbig, H., *So. s.* 90 Nassau St.
Van Gytenbeek, R. J., *Fr. a.* 11 Madison St.
VAN HOESEN, H. B., *Assistant Librarian,* (10), 16 Linden Lane
Van Houten, N. B., *So. a.* 442 C'y
VAN INGEN, G., *Associate Professor,* (9), 115 Broadmead
VAN RENSSELAER, A., *Trustee,* Philadelphia, Pa.
Van Rensselaer, C. A., Jr., *Fr. s.* 4 L P
Van Riper, K. E., *Fr. a.* 10 Moore St.
Van Sant, E. R., *Sr. a.* 6 N R
Van Vleck, J., Jr., *Jr. s.* 343 C'y
Van Wyck, G. L., *Fr. a.* 45 Park Pl.
van Zelm, H. H., *Fr. s.* 19 Madison St.
Vaughn, B. E., *Sr. a.* 138 Nassau St.
VEBLEN, O., *Professor,* (6), 58 Battle Rd.
Vedder, P. W., *Sr. a.* 8 L P
Veeder, H. G., *Jr. a.* 8 L P
Veeder, R., *Fr. s.* 27 Univ. Pl.
Velte, F. M., *f.* 78 G C
VERA, O., *Instructor,* (18), 10 A G C
Viehmann, G. A., *Fr. s.* 15 Univ. Pl.
Vigneras, A. L., *g.* 110 Moore St.
Vila, J. S., *Sr. s.* P
Vilsack, K. F., *Jr. a.* 90 Nassau St.
Vogel, R. E., *Sr. s.* A B
Vogt, H. G., *Fr. a.* 51 Park Pl.
Volkening, H. T., *Jr. a.* 13 P
von Schilling, F., Jr., *Sr. ce.* 83 Jefferson Rd.
Voorhees, B. V., *So. s.* 66 Nassau St.
VOORHEES, D., *Instructor,* (12), 151 Library Pl.
Voorhees, E. N., *g.* 11 A G C
Voorhees, R. V., *Sr. a.* 66 Nassau St.
Voss, G. K., *Jr. s.* 24 '79 H
Vossler, P., *Jr. a.* 306 H'm
VREELAND, W. U., *Professor,* (5), 180 Mercer St.
Wade, I. O., *f.* 103 G C
Wadleigh, F. R., Jr., *Sr. s.* 2 S D
Wadsworth, J. A., *So. ce.* 1 W M W
Wailes, E. T., *Fr. eng.* 46 Hill
Wainwright, J. T., *Sr. a.* 43 P
Wakem, H. H., *So. s.* 9 S E B
Walbridge, C. B., *Fr. s.* 20 Bank St.
Walker, W. C., *So. s.* 11 Dickinson St.
Wales, H. W., Jr., *Fr. a.* 10 Madison St.
Walker, E., Jr., *Fr. a.* 11 S E B
Wall, A. C., *So. a.* 21 Chambers St.
Wall, G. B., Jr., *Fr. s.* 15 S D
Wallace, J. M., *Jr. a.* 133 H
Wallace, L. J., *Fr. s.* 19 S W
Wallace, R. G., *Fr. s.* 30 Wiggins St.
Wallace, R. H., *Jr. a.* 34 B
Walley, H. R., *f.* 71 G C
Wallis, A. D., Jr., *Fr. a.* 10 Bayard Lane
Walsh, W. S., *Jr. a.* 81 B
Walter, J. R., *g.* 13 A S
Waltersdorf, M. C., *g.* 100 Stockton St.
Wangler, R. M., *Jr. a.* 141 H
WANLESS, H. R., *Reader,* (16), 104 G C
Warburton, F. W., *Fr. a.* 12 S W B
Ward, D., *Sr. a.* 42 P
Ward, H. L., *Sr. a.* 86 Stockton St.
Warner, G. C., Jr., *Sr. a.* 6 W W
Warner, R. M., *Sr. a.* 8 S E B
Warnock, M. R., *Fr. s.* 16 S E
WARREN, H. C., *Professor,* (4), 133 Library Pl.
Warren, I. S., *So. ce.* 12 Murray Pl.
Warren, J. D., *q.* 25 Chambers St.
Wasserman, W. S., *Sr. a.* 61 C
Waterbury, L., Jr., *Fr. s.* 19 Univ. Pl.
Waterman, A. W. D., *Fr. a.* 5 N M R
Waterman, R., *Fr. a.* 47 Park Pl.
WATERS, A. C., *Assistant Professor,* (11), 146 Nassau St.

Waterworth, H. A., *Jr. a.* 42 L
Webb, C. G., *Sr. a.* 5 W W
WEBB, T. J., *Assistant,* (15), 52 G C
WEBER, S. H., *Assistant Professor,* (11), 106 Broadmead
Webster, C. W., *Jr. a.* 8 S W
WEDDERBURN, J. H. M., *Associate Professor,* (9), 106 Nassau St.
Weekes, H. G., *Jr. a.* 52 B
Wefer, W. F., *g.* 115 H S
Wegge, W., *So. a.* 46 Wiggins St.
Weingarten R. L., *So. a.* 85 Hill
Weinberg, C. M., *Fr. s.* 86 N E
Weir, W. W., *g.* 304 H S
Weis, J. H., *Fr. eng.* 19 Edwards Pl.
Weiser, C. J., Jr., *Fr. a.* 41 Hill
Weiser, H. S., *So. a.* 101 L
Weishaar, A. R., *Jr. s.* 307 H'm
Welch, P. E., *Jr. a.* 112 H
Wells, A. A., *Sr. a.* 34 H
Wells, O., *Jr. a.* 72 H
Wells, R. C., *Sr. s.* 33 H
Wemmer, W. H., *Fr. s.* 13 A H
Wenger, R. H., *Sr. s.* 3 C H'm
WERTENBAKER, T. J., *Associate Professor,* (9), 111 Fitz Randolph Rd.
WEST, A. F., *Dean of the Graduate School,* (3), Wyman House, G C
West, M. O., *Sr. a.* 153 L
West, W. A., *Sr. a.* 11 N W
WESTCOTT, J. H., *Professor,* (4), Absent
Westerfield, J. R., *Jr. a.* 111 L
Westervelt, A. H., *Jr. s.* 3 S E B
Wever, G. D., *So. a.* 142 L
WHALAN, H. F., *Assistant,* (15), 4 B G C
Wheeler, G. B., *So. s.* 5 S W
Wheelock, W., Jr., *Fr. a.* 15 Dickinson St.
Wheelock, W. K., *So. a.* 7 Witherspoon St.
Wheelwright, C. W., *So. a.* 10 A H
Wheelwright, P. E., *f.* 74 G C
Whelan, C. J., *Sr. a.* 10 Moore St.
Whitaker, A. H., *Fr. a.* 10 Bayard Lane
Whitaker, R. C., *q.* 10 Bayard Lane
White, C. S., *Jr. a.* 33 B
White, W. C., *Jr. a.* 9 S W B
Whitehead, C. F., *Sr. s.* 58 B
Whitehead, K., *So. s.* 9 B
Whitley, M. G., *Jr. s.* 163 L
WHITNEY, G. T., *Assistant Professor,* (9), 88 Jefferson Rd.
Whitney, H., *Fr. a.* 3 N E
Whittingham, R. H., *Sr. s.* 9 N E
Wiberley, R. A., *Jr. ce.* 1 E M W
Wicoff, J. E., *Fr. a.* 7 S W B
Widenmann, G. A., *Sr. a.* 2 W M W
Wiegand, W. G., *Jr. a.* 132 L
Wiggan, G. A., *Jr. s.* 23 '79 H
Wilcox, E. C., *Jr. s.* 33 B
Willett, E. F., *So. a.* 10 S R
Willett, H. C., *So. s.* 10 S R
Williams, D. M., *So. a.* 11 S W B
Williams, C. W., *Fr. a.* 94 H
Williams, H., *So. a.* 4 S E B
Williams, J. C., *Fr. a.* 44 Hill
Williams, J. E., Jr., *Jr. a.* 9 A H
Williams, J. S., *So. a.* 8 A H
Williams, N. B., *Fr. s.* 2 A H
Williams, P. F. C., *Jr. s.* 85 P
Williams, R. L., Jr., *Jr. s.* 13 '79 H
Williams, S. H., *Jr. s.* 8 W B
Williams, W. D., *So. s.* 90 Nassau St.
Williams, W. T., *Sr. s.* 12 H
Williamson, R. E., *Sr. s.* 27 C
Willoughby, W., *Fr. s.* 62 C
WILLSON, F. N., *Professor,* (3), P. O. Box 63
Wilson, A. L., *Jr. s.* 3 W B
Wilson, C. V., *Fr. a.* 14 E W
Wilson, D. O., *Sr. a.* 11 S D
Wilson, E. M., *Jr. s.* 4 A C
Wilson, H. H., *Fr. a.* 9 Madison St.
Wilson, L. R., *Fr. a.* 23 N E
Wilson, R. G., *Fr. a.* 15 Dickinson St.
Wilson, R. R., *g.* 76 Alexander St.
Wilson, S. F., *Fr. s.* 31 Univ. Pl.
Wilson, W. L., *g.* 11 G C
Windisch, F. C., *So. a.* 24 Madison St.
Windt, V. B., *g.* 8 B G C